

on 4-22-2003

Dated 4-23-2003

Clerk of said Board of Supervisors

By Kay F. Johnson Deputy

RESOLUTION NO. 2003-0396

BE IT RESOLVED AND ORDERED that the Chair of the Board of Supervisors be and is hereby authorized and directed to execute the "Memorandum of Understanding Regarding Administrative Responsibilities and Apportionment of Costs Under NPDES Permit No. CAS0082597", in the form hereto attached, on behalf of the COUNTY OF SACRAMENTO, a political subdivision of the State of California, with the Cities of Citrus Heights, Elk Grove, Folsom, Galt, and Sacramento, and to do and perform everything necessary to carry out the purpose of this Resolution.

On a motion by Supervisor Johnson, seconded by Supervisor Dickinson, the foregoing Resolution was passed and adopted by the Board of Supervisors of the County of Sacramento this 22nd day of April, 2003, by the following vote, to wit:

- AYES: Supervisors, Dickinson, Johnson, Niello, Nottoli, Collin
- NOES: Supervisors, None
- ABSENT: Supervisors, None
- ABSTAIN: Supervisors, None

In accordance with Section 25103 of the Government Code of the State of California a copy of the document has been delivered to the Chairman of the Board of Supervisors, County of Sacramento on **APR 22 2003**

By Kay F. Johnson
Deputy Clerk, Board of Supervisors



Gene Collins

Chair of the Board of Supervisors
of Sacramento County, California

ATTEST: Cathy A. Turner
Clerk of the Board of Supervisors

FILED

APR 22 2003

BOARD OF SUPERVISORS
Cathy A. Turner
CLERK OF THE BOARD

RESOLUTION NO. 2003-30

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CITRUS HEIGHTS,
CALIFORNIA, APPROVING A MEMORANDUM OF UNDERSTANDING REGARDING
ADMINISTRATIVE RESPONSIBILITIES AND APPORTIONMENT OF COSTS UNDER
NPDES PERMIT NO. CAS0082597**

WHEREAS, Congress in 1987 amended Section 402 of the Federal Clean Water Act (33 U.S.C.A. Section 1342 (p)) to require the U.S. Environmental Protection Agency ("EPA") to promulgate regulations ("regulations") for permits for stormwater discharges; and

WHEREAS, the regulations are designed to control pollutants associated with stormwater discharges through the use of the National Pollutant Discharge Elimination System ("NPDES") permit system which allows the lawful discharge of stormwater into the waters of the United States; and

WHEREAS, the regulations are designed to require NPDES permits for discharges from municipal storm sewers on a system-wide or jurisdiction-wide basis; and

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region ("Regional Board") has been charged by the State of California, as delegated by the EPA, with the responsibility to issue NPDES permits within the Central Valley Region; and

WHEREAS, the Regional Board has adopted a NPDES stormwater permit (NPDES No. CAS0082597, Order No. R5-2002-0206 and hereinafter referred to as "Permit") for the County and the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova and Sacramento (hereinafter referred to collectively as the "Permittees") on December 2002, effective January 25, 2003; and

WHEREAS, the Permit requires the Permittees to monitor stormwater discharges and implement multiple programs to reduce the level of pollutants discharged into receiving waters; and

WHEREAS, the Permittees desire to develop an integrated stormwater discharge management program with the objective of improving water quality in urban creeks, the Sacramento River, American River, and the Delta; and

WHEREAS, the parties desire to receive and/or share the work product of consultants retained by the other parties, the direct work product of the parties themselves, and costs associated with monitoring and implementation of the program; and

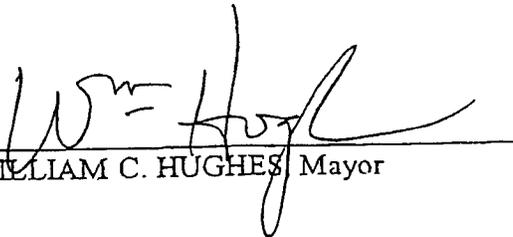
WHEREAS, in an effort to meet the deadline set forth by the NPDES permit, City Council grants authority to the city attorney and City Manager to approve minor changes to the MOU without returning to City Council.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED by the City Council of the City of Citrus Heights that the City Manager is hereby authorized to execute a Memorandum of Understanding Regarding Administrative Responsibilities and Apportionment of Costs Under NPDES Permit No. CAS0082597.

The City Clerk shall certify the passage and adoption of this Resolution and enter it into the book of original resolutions.

PASSED AND ADOPTED by the City Council of the City of Citrus Heights, California, this 26th day of March, 2003, by the following vote, to wit:

AYES: Council Members Bruins, Daniels, MacGlashan, Shelby and Hughes
NOES: None
ABSTAIN: None
ABSENT: None


WILLIAM C. HUGHES, Mayor

ATTEST:


LILLIAN E. HARE, City Clerk

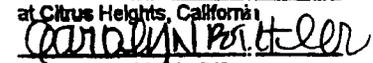
STATE OF CALIFORNIA
COUNTY OF SACRAMENTO
CITY OF CITRUS HEIGHTS

I, Lillian E. Hare, City Clerk of the City of Citrus Heights, certify the foregoing is the full and true Resolution 2003- 30, passed and adopted by the City Council of the City of Citrus Heights at a regular meeting held on March 26, 2003.

Dated: March 27, 2003


Lillian E. Hare, City Clerk

I hereby certify, under penalty of perjury, that this is a true and correct copy of the original document consisting of 2 pages which is on file in this office.

Executed on 6-24-03
at Citrus Heights, California

City Clerk's Office

RESOLUTION NO. 2003-76

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ELK GROVE TO
AUTHORIZE THE CITY ELK GROVE TO ENTER INTO A MEMORANDUM OF
UNDERSTANDING WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION
SYSTEM (NPDES) PERMITTEES IN SACRAMENTO COUNTY**

WHEREAS, the City of Elk Grove desires to take over responsibility for the Stormwater Drainage Program on July 1, 2003, from Sacramento County, which will include the responsibility for meeting the requirements of the NPDES permit; and

WHEREAS, the City of Elk Grove must sign a formal Memorandum of Understanding (MOU) with the other permittees in Sacramento County to meet the NPDES permit requirements.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Elk Grove hereby authorizes the Mayor to sign the new Memorandum of Understanding with permittees in Sacramento County.

PASSED AND ADOPTED by the City Council of the City of Elk Grove this 16th day of April 2003.

Rick Soares

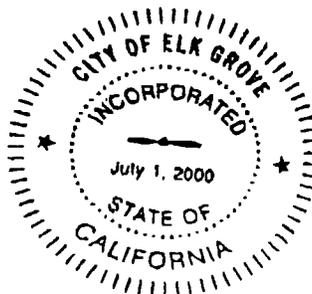
RICK SOARES, MAYOR of the
CITY OF ELK GROVE

ATTEST:

Peggy E. Jackson
PEGGY E. JACKSON, CITY CLERK

APPROVED AS TO FORM:

Anthony B. Manzanetti
ANTHONY B. MANZANETTI,
CITY ATTORNEY



The foregoing is a correct copy of a resolution adopted by City Council, City of Elk Grove, California

On 4-16-03
Dated 6-24-03
City Clerk of the City of Elk Grove
By *Peggy E. Jackson*

AYES: Soares, Briggs, Cooper, Leary
NOES: None
ABSTAIN: None
ABSENT: Scherman

RESOLUTION NO. 7052

A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE A MEMORANDUM OF UNDERSTANDING REGARDING ADMINISTRATIVE RESPONSIBILITIES AND APPORTIONMENT OF COSTS UNDER NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT NO. CAS082597

WHEREAS, in July 1992, a Memorandum of Understanding (MOU) was executed by the County of Sacramento and the Cities of Folsom, Sacramento, and Galt (the Co-Permittees) to define the apportionment of costs for joint activities conducted to comply with the provisions of National Pollutant Discharge Elimination System (NPDES) Permit CAS082597 (Permit); and,

WHEREAS, Resolution 3779 authorized execution of the apportionment MOU; and,

WHEREAS, in November 1996, an additional MOU was executed by the Co-Permittees to define the roles and responsibilities of conducting administrative services for joint activities to comply with the Permit; and,

WHEREAS, Resolution 5240 authorized execution of the administrative services responsibilities MOU; and,

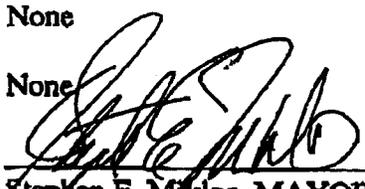
WHEREAS, on December 19, 2002, the California Regional Water Quality Control Board adopted a renewal of the Permit which included the addition of the Cities of Citrus Heights and Elk Grove; and,

WHEREAS, Provision 7e of the new Permit requires an updated MOU be executed no later than April 1, 2003, to identify the roles and responsibilities and apportionment of costs for joint activities to be conducted by the Co-Permittees:

NOW, THEREFORE, BE IT RESOLVED that the City of Folsom authorizes the Mayor to execute the Memorandum of Understanding regarding administrative responsibilities and apportionment of costs under NPDES permit no. CAS082597

PASSED AND ADOPTED on this 25th day of March 2003, by the following roll-call vote:

AYES:	Council Member(s):	Howell, King, Morin, Starsky, Miklos
NOES:	Council Member(s):	None
ABSENT:	Council Member(s):	None
ABSTAIN:	Council Member(s):	None



Stephen E. Miklos, MAYOR

ATTEST:



Christa Schmidt, INTERIM CITY CLERK

IT IS HEREBY CERTIFIED THAT THIS
IS A TRUE AND CORRECT
COPY OF Resolution No. 2003-40
ADOPTED ON 4-15-03
DATE CERTIFIED 4-22-03

Elizabeth Aguir
CITY CLERK, CITY OF GALT

RESOLUTION NO. 2003-40

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF GALT,
CALIFORNIA, APPROVING THE MEMORANDUM OF UNDERSTANDING
BETWEEN THE COUNTY OF SACRAMENTO, AND THE CITIES OF
SACRAMENTO, CITRUS HEIGHTS, ELK GROVE, FOLSOM AND GALT
REGARDING ADMINISTRATIVE RESPONSIBILITIES UNDER
NATIONAL POLLUTANTS DISCHARGE
ELIMINATION SYSTEM (NPDES)**

WHEREAS, the City of Galt is a co-permittee with Sacramento County and Cities of Sacramento, Citrus Heights, Elk Grove, and Folsom under a Stormwater National Pollutant Discharge Elimination System (NPDES) permit issued by Regional Water Quality Control Board (RWQCB); and

WHEREAS, this permit was adopted on December 6, 2002 by RWQCB and became effective January 25, 2003; and

WHEREAS, the NPDES permit required development and implementation of programs to reduce pollution caused by stormwater runoff in accordance with the Federal Clean Water Act and administered by the State of California Department of Water Resources; and

WHEREAS, the NPDES permit also requires that permittees enter into a Memorandum of Understanding outlining various activities required and each permittee's financial and permit requirement responsibilities.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED by the City Council of the City of Galt, California, that the Mayor, or in his absence, the Vice Mayor, is hereby authorized and directed to execute said Memorandum of Understanding between the County of Sacramento and the Cities of Sacramento, Citrus Heights, Elk Grove, Folsom and Galt.

BE IT FURTHER RESOLVED AND ORDERED that said Memorandum of Understanding is available and on file in the City Clerk's Office, and is incorporated herein by reference and made a part of this Resolution.

The City Clerk shall certify the passage and adoption of this resolution and enter it into the book of original resolutions.

PASSED AND ADOPTED by the City Council of the City of Galt, California, this 15th day of April, 2003, upon a motion by Council Member Malson, seconded by Council Member Raboy, by the following vote, to wit:

AYES:	Council members:	Shelton, Stancil, Malson, Raboy, Clare
NOES:	Council members:	None
ABSTAIN:	Council members:	None
ABSENT:	Council members:	None

Dorey Clare
MAYOR, City of Galt

ATTEST:

Elizabeth Aguir
CITY CLERK, City of Galt

**MEMORANDUM OF UNDERSTANDING REGARDING
ADMINISTRATIVE RESPONSIBILITIES AND
APPORTIONMENT OF COSTS UNDER
NPDES PERMIT NO. CAS0082597**

This Memorandum of Understanding ("MOU") is made and entered into this ___ day of _____, 2003 by the County of Sacramento ("County"), the City of Sacramento ("City of Sacramento"), the City of Citrus Heights ("Citrus Heights"), the City of Elk Grove ("Elk Grove"), the City of Folsom ("Folsom"), and the City of Galt ("Galt").

RECITALS

WHEREAS, Congress in 1987 amended Section 402 of the Federal Clean Water Act (33 U.S.C.A. Section 1342 (p)) to require the United States Environmental Protection Agency ("EPA") to promulgate regulations ("Regulations") for permits for stormwater discharges; and

WHEREAS, the Regulations are designed to control pollutants associated with stormwater discharges through the use of the National Pollutant Discharge Elimination System ("NPDES") permit system which allows the lawful discharge of stormwater into the waters of the United States; and

WHEREAS, the Regulations are designed to require NPDES permits for discharges from municipal storm sewers on a system-wide or jurisdiction-wide basis; and

WHEREAS, the EPA has delegated to the State of California the authority to issue NPDES permits; and

WHEREAS, the California Regional Water Quality Control Board, Central Valley Region ("Regional Board") has been charged by the State of California State Water Resources Control Board (SWRCB) with the responsibility to issue NPDES permits within the Central Valley Region; and

WHEREAS, on December 6, 2002 the Regional Board has adopted a NPDES stormwater permit, NPDES No. CAS0082597, Order No. R5-2002-0206, (hereinafter referred to as "Permit") for the County of Sacramento and the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova and Sacramento (hereinafter referred to collectively as the "Permittees" and individually as a "Permittee"); and

WHEREAS, the Permit is effective January 25, 2003; and

WHEREAS, the incorporation of the City of Rancho Cordova was approved by the voters in November 5, 2002; and

WHEREAS, the provisions of the Permit will apply to Rancho Cordova upon its incorporation which is effective July 1, 2003; and

WHEREAS, upon the incorporation of Rancho Cordova, the County will provide services to Rancho Cordova at least until June 30, 2004 related to compliance with the Permit; and

WHEREAS, the Permit requires the Permittees to monitor stormwater discharges and implement multiple programs to reduce the level of pollutants discharged into receiving waters; and

WHEREAS, the Permittees desire to develop an integrated stormwater discharge management program with the objective of improving water quality in receiving waters identified in the Permit including but not limited to, urban creeks, the Sacramento River, and the American River; and

WHEREAS, the Permittees will incur various other costs relating to monitoring and/or implementing programs; and

WHEREAS, the parties desire to receive and/or share the work product of consultants retained by the other parties, or the direct work product of the parties themselves; and

WHEREAS, the Permit requires execution of a MOU regarding administrative responsibilities and apportionment of costs.

NOW, THEREFORE, in consideration of the mutual promises hereinafter set forth, the Permittees agree as follows:

1. Purpose

This MOU formalizes the manner in which each Permittee shall collaborate with all other Permittees to address common issues, promote consistency among each Permittees' stormwater quality programs, coordinate resources in regional monitoring and public outreach programs, and plan and coordinate activities required to comply with the Permit.

This MOU provides a management structure and cost sharing method for the following:

- a. Term of MOU and participant responsibilities;
- b. Primary contacts and decision making;
- c. Designation of Joint Activities and cost sharing;
- d. Information management and reporting; and

- e. Other collaborative arrangements for NPDES Permit compliance activities.

2. Previous MOU superseded

This MOU supersedes and terminates the following agreements previously existing between the parties to this MOU:

- The MOU entitled "Memorandum Of Understanding Regarding Administrative Responsibilities Under NPDES Permit No. CA0082597", dated November 12, 1996.
- The MOU entitled "Memorandum of Understanding Regarding Apportionment of Costs for NPDES Program Activities" dated July 28, 1992.

This MOU does not affect, supersede, or modify any other agreements presently existing between any of the parties to this MOU.

3. Participants in MOU

The parties to this MOU include the County, Citrus Heights, Elk Grove, Folsom, Galt, and City of Sacramento.

4. Addition of new Permittees to MOU

Any newly incorporated city, including the City of Rancho Cordova, or any other local jurisdiction that becomes a Permittee due to action by the Regional Board, may become a party to this MOU. To become a party to this MOU, the governing body of the new Permittee must approve a separate addendum to the MOU making the new Permittee bound by its terms and conditions. Addition of a new Permittee in this manner shall not require further modification of this MOU nor approval by the other Permittees, except that Exhibit A shall be modified to reflect the new permittee and appropriate shared costs. A copy of any such addendum shall be made available to all the Permittees.

5. Rancho Cordova

Upon the incorporation of the City of Rancho Cordova ("Rancho Cordova") it will become a Permittee and the County will provide services pursuant to Government Code section 57348 to Ranch Cordova related to its compliance with the Permit and will implement the provisions of this MOU on behalf of Rancho Cordova. After June 30, 2004, Rancho Cordova may choose to comply with the Permit using its own staff or may contract with another entity to provide services related to its compliance with the Permit. After June 30, 2004, the Rancho Cordova City Council must approve an addendum to this MOU to bind Rancho Cordova to the terms of this MOU. If it fails to take this affirmative action, Rancho Cordova will not become a party to this MOU.

6. Term of MOU

The provisions of this MOU shall commence upon approval of this MOU by each of the Permittees and shall terminate upon adoption of a successor MOU or in a manner consistent with section 8 of this MOU.

7. Withdrawal of Individual Permittees

If any Permittee withdraws or ceases to be covered by the Permit, then said Permittee shall no longer be bound by all terms and conditions of this MOU except for the indemnity and hold harmless provisions of this MOU, which shall remain in full force as to acts or omissions occurring prior to withdrawal. The withdrawal of any Permittee shall not affect the terms and conditions of this MOU among the remaining Permittees, except that the cost sharing proportions shall be recalculated to reflect the changes caused by the withdrawal.

8. Termination

Each party shall have the right to withdraw from and terminate its responsibilities under this MOU at any time by serving upon all other parties thirty (30) business days advance written notice of withdrawal. The notice shall be deemed served and effective for all purposes on the date it is deposited in the United States mail, postage prepaid and addressed in accordance with the terms and provisions of this MOU.

Any party withdrawing from this MOU shall pay its proportionate share of any work performed under the MOU up to the effective date of withdrawal. This shall include unexpected expenses that were not known at the time of withdrawal, but are related to work or actions that occurred before the effective date of the withdrawal.

9. Indemnification and Claims

Notwithstanding any other provisions of this MOU, each Permittee shall indemnify, defend and hold harmless all other Permittees, their officers, agents, and employees from and against any and all claims, losses, liabilities or damages, including payment of reasonable attorney's fees and costs, arising, out of the Permittee's non-compliance with the Permit, through negligence, internal act or omission, or through any other act or omission by the Permittee, its officers, agents, employees, and/or subcontractors.

It is the intention of each Permittee that the provisions of this paragraph be interpreted to impose on each party responsibility to the other for the acts and omissions of their respective officers, directors, agents, employees, and/or contractors. It is also the intention of each Permittee that, where comparative fault is determined to have been contributory, principles of comparative fault will be followed and each party shall bear the proportionate cost of any damage

attributable to the fault of that party, its officers, directors, agents, employees, and/or contractors.

The County will be responsible for the administration of any public liability claims made against the parties to the MOU.

10. Insurance or Self-Insurance

Each party, at its sole cost and expense, shall carry insurance -or self-insure - its activities in connection with this Agreement, and obtain, keep in force and maintain, insurance or equivalent programs of self-insurance, for general liability, workers compensation, property, professional liability, and business automobile liability with coverage limits that are adequate to cover its potential liabilities hereunder, subject to the reasonable approval of the other parties. Each party agrees to provide the other thirty (30) days' advance written notice of any cancellation, termination or lapse of any of the insurance or self-insurance coverages.

11. Amendments

This MOU may be modified or amended in writing if executed by the governing body of all parties.

12. Responsibilities of Each Permittee

a. Each Permittee understands and agrees that there is no agency relationship between the Permittees. It is further understood and agreed by the Permittees that any person employed by each Permittee shall be entirely and exclusively under the direction, supervision, and control of the employing Permittee.

b. The Permittees are legal entities and have the authority to develop, administer, implement, and enforce stormwater management programs within their own jurisdictions. The individual Permittees are solely responsible for compliance with the Permit within their respective jurisdictions. The County is solely responsible for compliance with the Permit within the urbanized unincorporated areas of the County of Sacramento.

c. Each Permittee acknowledges, understands, and accepts that it is legally bound by the terms and conditions of the Permit as issued by the Regional Board.

d. Each Permittee is solely responsible for the retention and/or storage of its own data, documents, and reports or writings, for the length of time required by the Permit or until three years after the expiration of the Permit, whichever is greater.

e. Each Permittee is responsible for complying with the provisions of the California Environmental Quality Act (CEQA, Public Resource Code section 21000, et seq.) in connection with the implementation of the terms, conditions, and requirements of the Permit and this MOU.

13. Separate Agreements between Permittees

Nothing in this MOU shall prevent individual Permittees from entering into agreements with each other or with other parties to obtain or to provide services related to implementation of Permit or MOU obligations. Such service agreements do not relieve individual Permittees from their obligations under the Permit or this MOU, and obligations under this MOU will supercede any conflicting obligations of separate agreements.

14. Primary Contacts

The County and City of Sacramento shall serve as the primary co-contacts with regulating agencies such as EPA, SWRCB, and the Regional Board regarding Permit matters that are of interest to all Permittees. Permit matters that are specific to a particular jurisdiction should be addressed directly to that jurisdiction. The County and City of Sacramento shall relay and transmit any correspondence relating to the Permit received from the Regional Board, SWRCB, or EPA to the other Permittees within five (5) business days of receipt. The designation of primary contacts is intended only as a convenience for the regulating agencies, and each Permittee understands and agrees that this provision does not relieve each Permittee of any of its Permit obligations, nor imposes any new Permit obligations on the County and City of Sacramento.

15. Information sharing

Except as provided in the section of this MOU entitled "Non-participation in Joint Activities", if any Permittee submits any required documents, reports, or writings relating to stormwater discharges to the Regional Board, SWRCB, or EPA, said Permittee shall send a copy of the document, report, or other writing to the each other Permittee. At its discretion, the Permittee sending copies of documents may require reimbursement from the receiving parties for its copying costs.

Each Permittee agrees to make available to the other parties to this MOU all non-confidential and non-privileged data, documents, reports, or writings that are public records relating to the Permit upon written request. At the discretion of the Permittee that is providing the copies, the Permittee requesting the information shall be responsible for all costs incurred in connection with said request, including copying costs.

16. Steering Committee

The Permittees shall establish a Steering Committee, consisting of representatives designated by their jurisdiction's management. The purpose of the Steering Committee is to provide forum for making decisions and providing guidance to the Permittees relative to the implementation of common activities that are subject to the terms of this MOU. The responsibilities and activities of the Steering Committee including, but not limited to, the following:

- Oversight of MOU implementation
- Resolution of issues and disputes regarding this MOU
- Management of Joint Activities defined in this MOU
- Management and designation of additional Joint Activities not specified in this MOU.
- Approval of the scope of Joint Activities.
- Designation and approval of reimbursable staff support for Joint Activities.
- Determination of reimbursement mechanisms.

Any action by the Steering Committee requires the support of at least two-thirds of all the Steering Committee members. The Steering Committee may conduct its business, including any official actions or approvals, in various reasonable manners as it sees fit, provided that a good faith effort is made to accommodate the preferences of all members. Methods for conducting Steering Committee business may include but are not limited to the following: meetings conducted in person, telephone, email, on-line discussions, routing of hard copy by courier or U.S. Mail, or any reasonable combination of methods.

Each Steering Committee representative has an equal vote on the Steering Committee.

The management of any Permittee jurisdiction may delegate authority to another authorized representative to represent it on the Steering Committee, including the casting of its vote. This does not relieve each Permittee of the responsibility to obtain funding authority or any other authority necessary for participation in a Joint Activity.

17. Joint Activities

The terms and conditions of this MOU apply to activities, as defined in this section, that are related to compliance with the requirements of the Permit, and that provide work products, services, or other benefits that are of common benefit to all Permittees. Such activities shall be referred to herein as "Joint Activities".

18. Joint Activities designated in MOU

a. **Mandatory Joint Activities.** The following activities are hereby designated as Joint Activities and include projects specified in the Permit. All the signatories of this MOU agree to participate in cost sharing for these activities:

- (1) Annual Monitoring Report
- (2) Development Standards Plan
- (3) Urban Discharge Monitoring
- (4) River Monitoring
- (5) Water Column Toxicity Monitoring
- (6) Urban Tributary Monitoring
- (7) Additional Pesticide Monitoring
- (8) Bioassessment
- (9) Water Quality Detention Effectiveness Study
- (10) Erosion Potential Study
- (11) Dry weather flow diversion study
- (12) Structural BMP Effectiveness Studies

b. **Optional Joint Activities.** With respect to the Joint Activities described in this section, the Permittee advocating the activity will query the Permittees to determine whether or not they agree to cost-share in the particular support activity. If a Permittee does not desire to cost share in the support activity, they will not be included in the cost share formula for that activity, and will be considered a non-participant subject to the restrictions in the Non-Participation in Joint Activities section of this agreement. Optional Joint Activities include, but are not limited to:

- (1) Monitoring Program Support contract
- (2) The following elements of the Pesticide Control Program:
 - (a) Water Wise Pesticide Outreach
 - (b) PRISM grant for pesticide activities
 - (c) Participation in Urban Pesticide Committee
 - (d) Pesticide Program Support contract
- (3) Certain portions of the Public Education and Outreach Programs requirements as designated and approved by the Steering Committee

19. Joint Submittals

All Permittees agree to cooperate on a consolidated submittal for the Joint Activities designated in this MOU. To facilitate and coordinate these submittals, each year the Steering Committee shall designate a lead agency or agencies for each submittal. The lead agency will be responsible for overall coordination, completion, and delivery of the submittal. The lead agency shall deliver or mail to the Regional Board joint compliance documents, reports, or other writings.

The other Permittees agree to prepare and forward to the lead agency in a timely manner, any jurisdiction specific sections that are necessary for these submittals. When the Permit requires submission of any joint compliance documents, reports, or other writings by a specific date, each Permittee shall ensure that the lead agency receives the document, report, or other writing to be filed thirty (30) business days prior to the specified date unless a different time is otherwise agreed to in writing by the Permittees. In the event that a Permittee is unable to comply with this provision for any reason, said Permittee shall notify the other Permittees in writing of the anticipated submission date and the reason for the delay, and shall provide a copy of the letter to the Regional Board.

20. Designation of Additional Joint Activities

The Steering Committee shall be responsible for the consideration and designation of additional activities as Joint Activities. Joint Activities should be activities that provide work products, services, or other benefits that are of benefit to all Permittees.

21. Documentation of Joint Activities

For each Joint Activity designated by this MOU or by the Steering Committee, the Steering Committee or the lead agency responsible for the implementation of the activity shall provide all Permittees with adequate documentation. This documentation shall include the following elements and any other documentation as determined by the Steering Committee:

- a. Description of the scope and purpose of the activity;
- b. Copies of applicable contracts;
- c. Significant decisions regarding the management of the activity;
- d. Any changes to the scope and purpose of a joint activity shall be in writing.

Each Permittee shall submit documentation to the other Permittees indicating whether or not it will participate in each Joint Activity, except for mandatory Joint Activities designated in this MOU.

22. Non-participation in Joint Activities

Permittees must participate in the mandatory Joint Activities as designated in this MOU. For any other Joint Activity, a Permittee may choose not to participate. A Permittee that chooses not to participate, fails to obtain proper authority to fund the Joint Activity, or fails to pay its portion of costs, will be considered a Non-Participant and shall not be entitled to the consultant services or the use of work products resulting from the Joint Activity. In addition, Non-Participants for a given Joint Activity may not claim or imply participation in any public documents, including any reports to the Regional Board, such as Annual Progress Reports or Annual Monitoring Reports. Any Non-Participant that fails to comply with these

restrictions, thereby gaining the benefit of a particular Joint Activity, shall be liable to reimburse the other Permittees, according to the cost sharing provisions of this MOU, as though it had been a full participant in the Joint Activity.

23. Contract Administrator

For each designated Joint Activity that requires contracted services, the Steering Committee shall designate one Permittee that is willing to serve as the Contract Administrator. The Contract Administrator shall be responsible for the following activities for each contract:

- a. Establish a contract through its jurisdiction.
- b. Act as the fiscal agent for the contract and provide accounting of costs as needed.
- c. Provide on-going contract administration.
- d. Maintain records regarding Permittee decisions, agreements, and obligations related to the contract and the Joint Activity.
- e. Update other Permittees in a timely manner regarding implementation of the Joint Activity and the status of pertinent contracts.
- f. Distribute to other Permittees copies of studies, reports, and other work products prepared per the contract.

Upon approval by the Steering Committee, the Contract Administrator for a particular Joint Activity may be entitled to reimbursement of costs from the other Permittees, according to the cost sharing proportions in Exhibit A. Such reimbursement may include staff time and other resources used to provide contract administration on behalf of the other Permittees.

The Contract Administrator shall be authorized to conduct day-to-day administration of the contract. However, no changes to the scope of services or the approved contract amount shall be made without the approval of the Steering Committee.

24. Ownership of Work Product

All technical data, evaluations, plans, specifications, reports or other work products associated with a Joint Activity produced by a consultant or any party to the Joint Activity shall become the mutual property of all participating parties, subject to Federal copyright laws.

25. Communication with Consultant

Each party may communicate directly with a consultant, except as set forth below:

- a. Any communications relating to a change or modification in the scope of work to be performed by a consultant, or any communication which will

increase or should reasonably be expected to increase the compensation due to a consultant shall not be submitted to the consultant unless:

1. The Steering Committee approves the change or modification; or
 2. The Steering Committee does not object and the party requesting the change or modification advises all other parties in writing that it will be solely responsible for any and all compensation due to the consultant resulting from said change or modification.
- b. Any communications relating to a change or modification in the schedule of performance shall not be submitted to a consultant unless all parties agree to the change or modification.
- c. If any party submits any document, reports or writing to a consultant, as provided herein, a copy of such document, report or writing shall be submitted to all other parties.

26. Permittee responsibilities for Joint Activities

Each Permittee is responsible for the following:

- a. Designation of an authorized representative and any necessary alternates to the Steering Committee.
- b. Accurate documentation of staff time and other resources for which Joint Activity cost share reimbursement is claimed.
- c. Obtaining any necessary legal and administrative authority to participate in each Joint Activity.
- d. Timely payment of all monetary obligations as a Participant.

27. Cost Apportionment for Joint Activities

- a. Each Permittee understands and acknowledges that the implementation of the terms, conditions, or requirements of the Permit by each Permittee may result in significant benefit to the other Permittees. It is the intent of the Permittees to fairly and equitably apportion the costs of such benefits. When a Permittee agrees to participate in a Joint Activity it agrees to share the costs of the Joint Activity as defined by this MOU and the Steering Committee.
- b. Cost apportionment for Joint Activities shall apply to any costs associated with contracting under this MOU, including but not limited to, services, materials, and equipment.
- c. Cost apportionment for Joint Activities may include the following as specified and approved by the Steering Committee:

1. Contract administration by Permittee staff.
2. Significant Joint Activity support provided by specified Permittee staff.
3. Any other expenses that provide a shared benefit to the Permittees.

d. Each Permittee is responsible for confirming or obtaining the necessary authority from its governing body and to meet any other legal and administrative requirements of its jurisdiction to provide the funding for its participation in Joint Activities.

28. Cost Apportionment Method

All parties hereby agree that any compensation due to consultants or any other party under the terms and conditions of this MOU shall be apportioned among all parties participating in a given Joint Activity, in proportion to their respective populations, utilizing the following method:

- The populations used for this apportionment shall be based on the official population estimates of the Sacramento Area Council of Governments (SACOG) for the years 2000 and 2010,
- The arithmetic mean of the population of each Permittee for these years will be calculated.
- The calculated mean populations will be used to determine the cost share proportions of each Permittee.

The SACOG population estimates and calculated population proportions agreed to by the Permittees are shown in Exhibit A of this MOU.

Upon approval by the Steering Committee, revised official SACOG estimates may be used to recalculate the population proportion used for allocating costs.

29. Invoicing, Payment, and Notices

The Contract Administrator shall, upon receipt of an invoice from the consultant, or upon the computation of the charges for the work product, send a copy of said invoice or computation to all participating parties.

The participating parties shall advise the Contract Administrator of any disputed amount in writing within ten (10) business days of the receipt of said invoice. The Contract Administrator shall thereafter submit separate invoices to the participating parties for their proportioned share of the undisputed amount. The participating parties shall pay to the Contract Administrator their invoiced share within thirty (30) business days of receipt of the separate invoice. The parties agree to exercise good faith and diligence in the resolution of any disputed invoiced amounts.

Unless the persons or addresses are otherwise identified in the manner specified in this paragraph, all invoices, payments or notices or other writings authorized or

required by this MOU shall be deposited in the United States mail, postage prepaid and addressed to the respective parties as follows:

County: Department of Water Resources County of Sacramento 827 7 th Street, Room 301 Sacramento, CA 95814 Attn: Stormwater Program Manager	City of Sacramento: Director Department of Utilities City of Sacramento 1391 35 th Ave Sacramento, CA 95822
Elk Grove: Manager of Engineering and Building City of Elk Grove 8400 Laguna Palms Way Elk Grove, CA 95758	Folsom: Director Department of Public Works/City Engine City of Folsom 50 Natoma Street Folsom, CA 95630
Galt: Director Public Works Department City of Galt 495 Industrial Drive Galt, CA 95632	Citrus Heights: Director, General Services Department 6237 Fountain Square Drive Citrus Heights, CA 95621-5577

30. Dispute resolution

Whenever any party disagrees as to any matter covered under this MOU, this dispute resolution process shall govern. Until the dispute is resolved, all parties shall continue to perform pursuant to the terms of this MOU.

The parties shall make a good faith effort to resolve the dispute at the Steering Committee level. If this effort is unsuccessful, within ten (10) business days after the identification of the dispute, any party may give the other party a written request for a meeting between the respective Department Directors or Directors' designees. The purpose of this meeting shall be to ascertain whether a resolution of the disagreement is possible without third party intervention.

31. Entire MOU

Except as provided otherwise herein, this instrument and any attachments hereto constitute the entire MOU between the parties concerning the subject matter hereof.

32. Execution in Counterparts

This agreement may be executed in counterparts.

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed as of the day and year first above written.



County of Sacramento

By: Illa Collin

Illa Collin, Chair
Board of Supervisors

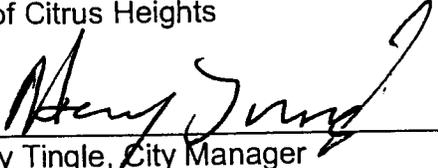
Gedys A. Turner
Clerk of the Board of Supervisors

REVIEWED AND APPROVED BY
COUNTY COUNSEL

Deputy County Counsel

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed as of the day and year first above written.

City of Citrus Heights

By: 
Henry Tingle, City Manager

Attest:

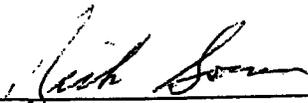

City Clerk

Approved as to form:

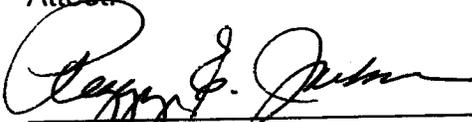

City Attorney, City of Citrus Heights

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed as of the day and year first above written.

City of Elk Grove

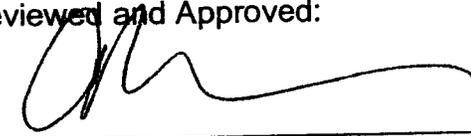
By: 
Rick Soares
Mayor

Attest:


City Clerk



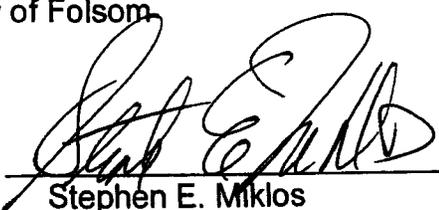
Reviewed and Approved:


City Attorney, City of Elk Grove

Memorandum of Understanding Regarding
Administrative Responsibilities and Apportionment
of Costs Under NPDES Permit No. CAS0082597

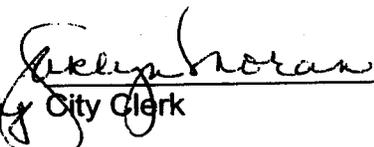
IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed as of the day and year first above written.

City of Folsom

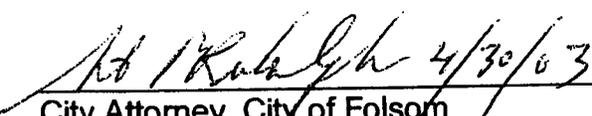
By: 

Stephen E. Miklos
Mayor

Attest:

 Kelly Moran 5-8-03
Deputy City Clerk

Reviewed and Approved:

 Atty. Ralph 4/30/03
City Attorney, City of Folsom

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed as of the day and year first above written.

City of Galt

By: Darryl Clare
Darryl Clare
Mayor

Attest:

Elizabeth
City Clerk

Reviewed and Approved:

Richard D. Zeege
City Attorney, City of Galt

IN WITNESS WHEREOF, the parties hereto have caused this MOU to be duly executed as of the day and year first above written.

City of Sacramento

By: Heather Fargo
Heather Fargo
Mayor

By: G. A. Reents
Gary A. Reents
Director of Utilities

Attest:

Michelle K. Haun
City Clerk

Reviewed and Approved:

Joe Moran
Deputy City Attorney

CITY
AGREEMENT NO. 2003-054

Exhibit A

Cost Share Percentages for Stormwater Permittee Joint Activities

Jurisdiction	2000 Population	2005 Population	2010 Population	Average Population 2000- 2010	Percent of Average Population 2000- 2010	Cost Share Percentage, Based on Percent of Average Population, rounded to nearest 0.5%
Citrus Heights	89,050	91,350	91,650	90,350	6.75%	7.0%
Elk Grove	72,685	98,110	122,600	97,643	7.30%	7.0%
Folsom	53,810	62,900	74,185	63,998	4.78%	5.0%
Galt	18,425	23,450	26,490	22,458	1.68%	1.5%
Rancho Cordova	46,642	53,234	65,143	55,893	4.18%	4.0%
Sacramento, City	409,610	446,960	485,420	447,515	33.44%	33.5%
County, Unincorp (less Rancho Cordova)	527,788	558,269	593,304	560,546	41.88%	42.0%
County total less Isleton	1,218,010	1,334,273	1,458,792	1,338,401	100.00%	100.0%

Sacramento Stormwater Quality Partnership

HYDROMODIFICATION MANAGEMENT WORK PLAN

Revised September 22, 2009

Introduction

This work plan describes the proposed tasks and schedule to prepare the Sacramento Area Hydromodification Management Plan (HMP). This work plan and the eventual HMP are required compliance deliverables of the Sacramento Areawide Municipal Stormwater Permit (Sacramento Municipal Permit), Order R5-2008-0142, adopted by the Central Valley Regional Water Quality Control Board (Regional Water Board) on September 11, 2008. The work plan is due April 30, 2009 (submitted and revised on September 22, 2009) and the HMP is due one year following the approval of the work plan by the Regional Water Board.

This work plan was prepared by the Sacramento Stormwater Quality Partnership (Partnership or permittees); which includes the County of Sacramento and the Cities of Sacramento, Rancho Cordova, Galt, Folsom, Elk Grove, and Citrus Heights. The County of Sacramento, on behalf of the SSQP, will be the lead agency for the HMP development effort and will solicit and administer consultant services to produce the HMP. The cost of developing the HMP will be shared between the permittees per the latest *Memorandum of Understanding for the Sacramento Stormwater Quality Partnership*.

The permittees plan to adopt an HMP approach that promotes consistency across the county and equity for the development and landowner community, while building on others' experiences.

Background and Regulatory Requirements

Provision 15.c of the Sacramento Municipal Permit states: "The HMP shall require controls to manage the increases in the magnitude (e.g., flow control), frequency, volume and duration of runoff from development projects in order to protect receiving waters from increased potential for erosion and other adverse impacts with consideration towards maintaining (or reproducing) the pre-development hydrology".

The Sacramento Municipal Permit identifies exemptions from the HMP requirements for projects that discharge to waterways with low erosion potential. These exemptions include:

- (a) Discharges into creeks that are concrete-lined or significantly armored;
- (b) Underground storm drain systems discharging directly to the rivers;

- (c) Construction of infill projects in highly developed watersheds, where the potential for single-project and/or cumulative impacts is minimal; and
- (d) Projects that do not create an increase in impervious surfaces over pre-project conditions.
- (e) A project within a transit oriented corridor or within ½ mile of a transit station and/or intermodal facility.
- (f) Redevelopment projects that redevelop existing brownfield sites or creates affordable housing.

The HMP development effort will build upon the foundation created in past years by the permittees, including these work products:

- Development Standard Plan (DSP), December 2003
- Each Permittee's amended development standards, May 2006
- Stormwater Quality Design Manual for the Sacramento and South Placer Regions May 2007.

The Partnership recently completed several tasks in order to develop this work plan:

1. Review of Current and Past HMPs Statewide

The Partnership worked with Eric Berntsen of the State Water Board to advise his research of other HMP programs in California. The State Water Board produced a table (attached to the Partnership's pilot project report appendix A described below) describing and comparing the existing HMP efforts statewide. This information allows the Partnership to take advantage of lessons learned from other areas in the State; such as modeling criteria, development of design tools, schedule and cost.

2. Coordination with Other Statewide Hydromodification Related Efforts and Technical Experts

The Partnership will be developing the HMP based on the findings of other HMPs around the state and is therefore actively engaged with several groups that are sharing information for the benefit of others. These include:

- Hydromodification Planning Group – State Water Board initiative
- Southern California Coastal Water Resources Project (SCCWRP) Regional Hydromodification Management Study
- Riparian Buffers Research Initiative – State Water Board

The permittees have involved various technical experts in the process to provide technical and peer review of the Sacramento pilot project and help ensure that it is consistent with other statewide findings and recommendations. These professionals include:

- Brian Bledsoe, Colorado State University
- Eric Stein, Southern California Coastal Water research Project
- Matt Yeager, San Bernardino County

3. Completion of the Sacramento Pilot Project

The permittees retained a consultant to conduct a pilot project in Sacramento County and prepare a report of findings and recommendations. This pilot project helps form the basis of this work plan and the eventual HMP. The pilot project is described in more detail below.

Technical Approach: The Sacramento Pilot Project

In 2008, the Partnership conducted a pilot project for a portion of a relatively small watershed that represents various development conditions (from undeveloped to fully developed) in Sacramento County (Elder Creek) to recommend/demonstrate the technical methodologies that could be used to evaluate the susceptibility of this creek and other local creeks to erosion and degradation. The findings of this pilot project are included in the attached memo (*Pilot Project to Access Decision Support Tools for Hydromodification Management in the Sacramento Area*) and form the basis for developing the areawide HMP.

The pilot project consisted of a three tiered approach:

Tier 1 - Development of an Applicability and Susceptibility Mapping Screening Tool

- Developed HMP criteria based on review of other related studies and factors pertinent to local area. Reviewed existing documents to synthesize example criteria and design standards (e.g. Alameda, Santa Clara, etc.).
- Developed GIS layers and information. This task included: Defining accurate creek alignments through a combination of terrain and aerial techniques; creating an overlay of community specific plans; defining creek types (i.e. lined, natural, etc.) through desktop analysis and input from Sacramento County about operation and maintenance and plans in progress; and defining creek ecology using readily available sources (e.g., existing bioassessments, habitat conservation plans, etc.) to include as a GIS layer, if available.

- Developed susceptibility mapping using an appropriate GIS-based alternative analysis. Determined appropriate stream power thresholds based on literature review and inspection of field conditions.

Tier 2 - Field verification of Screening Tool

- Conducted field geomorphic assessment and other assessment methodologies to verify GIS analysis, for representative accessible sites in the pilot watershed.

Tier 3 - Development of Preliminary Procedures for Hydromodification Mitigation

- Conducted research of other HMP efforts to gather data for relating a suitable stream power threshold with potential mitigation actions.
- Recommended various mitigation measure concepts for hydromodification management to meet the requirements of the Sacramento Municipal Permit, based on findings of the Sacramento pilot project:
 - Integrated On-site Low Impact Development (LID) design strategies
 - Flow-duration basins
 - In-stream restoration
 - Planning measures (e.g. natural buffers)

Anticipated HMP Components/Tasks

The Sacramento County HMP is anticipated to be completed in two phases. Phase 1 consists of developing an applicability map and interim criteria. Phase 2 consists of developing the susceptibility map, finalizing the HMP criteria and updating the development standards. The permittees retained consultant services in FY 2009-10 to assist with conducting all or some of the following work in order to prepare the Sacramento Area HMP:

Phase1:

- Characterize stream conditions and future development patterns using existing drainage facility maps, land use maps, and Lidar data.
- Develop applicability criteria and produce an “Applicability Map” based on the criteria identified (proposed) in the pilot project.
- Develop scientific interim HMP mitigation criteria to provide guidance for proposed development projects.

- Develop design and analysis tools for implementing Interim HMP mitigation requirements.
- Implement or co-sponsor training for agency staff, the development community, and local engineers.
- Conduct Outreach with the development community (likely via the Building Industry Association (BIA), Civil Engineers and Land Surveyors of California (CELSOC), and others), the environmental community and other interested parties.

Phase 2:

- Select assessment method and produce a “Susceptibility Map” based on the criteria identified (proposed) in the pilot project.
- Use Continuous Simulation Modeling and hydrograph matching analysis to develop sizing criteria for HMP mitigation measures.
- Develop design tools for implementing the HMP requirements.
- Adopt amendments to local permitting agency codes, procedures and programs.
- Incorporate hydromodification management technical guidance into the *Stormwater Quality Design Manual for Sacramento and South Placer Regions (Stormwater Quality Design Manual)*. Develop an integrated approach for hydromodification and LID criteria that builds on the existing measures in the *Stormwater Quality Design Manual*.
- Conduct Outreach with the development community (likely via the Building Industry Association (BIA), Civil Engineers and Land Surveyors of California (CELSOC), and others), the environmental community and other interested parties.
- Implement or co-sponsor training for agency staff, the development community, and local engineers.
- Continue to collaborate and coordinate with the State Water Board and appropriate technical experts.

Please refer to Figure 1 for a draft HMP outline. Outline to be finalized as the HMP document is developed.

Anticipated HMP Adoption and Implementation Schedule

Activity	Date
Submit HMP work plan to Regional Water Board	April 30, 2009 (submitted and revised on September 22, 2009)
Conduct informational workshop for development community and other interested parties	Summer 2010
Retain consultant services to assist with HMP development.	Fall 2009
Conduct work needed to prepare Phase 1 of the HMP	Fall 2009-Fall 2010
Submit Phase 1 of the HMP to Regional Water Board for approval	Fall 2010 (1 year after regulatory approval of HMP work plan)
Amend individual permittee development standards to implement the HMP requirements	6 months after Regional Board approval of Phase 1 of the HMP
Update technical guidance (<i>Stormwater Quality Design Manual</i>) to include HMP design criteria	6 months after the amendment of the development standards
Develop and finalize Phase 2 of the HMP	12-18 months after approval of Phase 1 of the HMP as funding allows
Conduct outreach to the development community	During and after update of technical guidance
Conduct training of agency staff	During and after update of technical guidance

Figure 1

HMP Outline (draft)

Chapter 1: Background

- Problem Statement
- Permit Requirements Overview
- Work Completed Previously
- Background on Sacramento County Watersheds

Chapter 2: Areas Subject to HMP

- Applicability Mapping
- Susceptibility Mapping

Chapter 3: HMP Design Criteria

- Low Impact Measures
- Flow Duration Control Measures
- In-stream Measures

Chapter 4: HMP Implementation Process

- Incorporating HMP Requirements into Local Approval Process
- Implementation Timeline
- Outreach
- Inspection and Maintenance Requirements

Memorandum



DATE: April 16, 2009

TO: Delia McGrath, City of Sacramento
Ken Ballard, County of Sacramento

SUBJECT: Pilot Watershed - New Development BMP
Effectiveness Evaluation Work Plan

Cc: Brian Laurenson, LWA

Rebecca Winer-Skonovd, Senior Scientist
707 Fourth Street
Suite 200
Davis, CA 95618
530.753.6400
530.753.7030 Fax
rebeccaw@lwa.com

This memorandum describes the Work Plan to be implemented by the City of Sacramento and the County of Sacramento for the New Development BMP Effectiveness Evaluation as prescribed under Permit No. R5-2008-0142.

The current National Pollutant Discharge Elimination System (NPDES) area-wide Municipal Separate Storm Sewer Systems (MS4) permit, Order No. R5-2008-0142, Monitoring and Reporting Program, Provision III.C., requires the permittees to conduct an evaluation of the effectiveness of new development best management practices (BMPs). The provision states:

1. The Permittees shall prepare and implement a work plan over the permit term for monitoring a receiving water site within the Upper Laguna Creek Collaborative project area. The work plan shall be submitted as part of the revised SQIP.

The objective of the study shall include the following:

- a. Monitor the reduction of pollutants of concern in storm water including, but not limited to, pathogen indicators, nutrients, heavy metals (including total mercury and methylmercury), and pesticides from a minimum of one BMP (e.g., low impact development) to determine BMP effectiveness;
- b. Evaluate the requirements for and installation and maintenance cost of each BMP; and
- c. Develop recommendations for appropriate BMPs for the reduction of pollutants of concern in storm water in the Sacramento urbanized area.

Due to the current and uncertain nature of the housing market, the Permittees do not expect that a development project will be completed within the Upper Laguna Creek watershed within the Permit term. As a result, Permittees propose the following revisions to Provision III. C. Pilot Watershed – New Development BMP Effectiveness Evaluation:

1. The Permittees shall prepare and implement a work plan over the permit term for monitoring a receiving water site within the Upper Laguna Creek Collaborative project area. If there is insufficient new development in this study area prior to 2011, the study may be moved to an alternate location and/or be modified to consider a specific new development BMP. The work plan shall include three optional study elements. The work plan shall be submitted as part of the revised SQIP.

This document serves as the Work Plan for the proposed Permit modifications. The document is organized around the following sections:

- Potential Monitoring Locations and Approach
- Sampling Plan
- Technical Report
- Schedule
- References

POTENTIAL MONITORING LOCATIONS AND APPROACH

A BMP or receiving water site will be monitored within Permit years 4 and 5. If a BMP is selected, influent and effluent will be monitored during three storm events each year for a total of six storm events during the permit term. In addition, the ability of the BMP to reduce runoff volume will be monitored as this has an impact on the overall pollutant load. If a receiving water site is selected, the monitoring schedule will match that of the other Permittee receiving water monitoring sites (3 wet, 1 dry per year). As indicated above in the proposed permit modifications, 3 primary options exist:

- 1) Monitor a new development BMP within the Upper Laguna Creek watershed
- 2) Monitor a Low Impact Development (LID)-type BMP outside of the Upper Laguna Creek watershed
- 3) Monitor a receiving water site within the Upper Laguna Creek watershed to establish baseline

Monitor a New Development BMP within the Upper Laguna Creek Watershed

Permittees will track the progress of potential development projects within the Upper Laguna Creek watershed. In particular, the status of two proposed development projects will be tracked closely (Figure 1):

Arboretum (also known as the Waegell Property)

This proposed new development project consists of more than 1,300 acres of mixed use, including residential units, commercial sites, open space and two schools. Initial plans indicate that stormwater management will primarily consist of detention basins designed to prevent hydromodification. While the planning process for this project continues to move forward, completion is not expected within the Permit term.

Suncreek

This proposed new development project consists of approximately 1,300 acres of mixed use which primarily includes medium to high density residential units and small amount of commercial development. Initial plans indicate that stormwater management will primarily consist of detention basins designed to prevent hydromodification. Construction is currently delayed and it is anticipated that 2010 is the earliest possible construction start date which will allow little to no time for BMP monitoring within the Permit term.

In the event that an Upper Laguna Creek watershed development projects appears as though completion is feasible within the Permit term, the Permittees will select one of the detention basins designed to prevent hydromodification for monitoring. This BMP would provide new data regarding the effectiveness of hydromodification criteria with regard to water quality and runoff reduction. Monitoring will be conducted during Permit Years 4 and 5.

Monitor a Low Impact Development (LID)-Type BMP Outside of the Upper Laguna Creek Watershed

If a new development BMP in the Upper Laguna Creek watershed has not been identified for monitoring by the end of Permit Year 2, Permittees will identify a LID-type BMP within the Permittee area. BMP monitoring will be conducted during Permit Years 4 and 5. BMP selection will be prioritized based on data needs. Currently, the Permittees lack information on the ability of the following BMPs to remove Target Pollutants:

- Green Roof
- Infiltration Basin
- Infiltration Trench
- Porous Pavement
- Stormwater Planter
- Vegetated Filter Strip

Monitor a Receiving Water Site within the Upper Laguna Creek Watershed to Establish Baseline

In the event that a new development BMP within the Upper Laguna Creek watershed and a LID-like BMP within the Permittee area cannot be identified, Permittees will establish a receiving water monitoring site in the Upper Laguna Creek watershed to monitor baseline conditions. Receiving water monitoring will be conducted during Permit Years 4 and 5.

Monitoring the receiving water site will provide Permittees with valuable water quality data as the Upper Laguna Creek watershed develops over time. This data can also provide a baseline of water quality conditions for when development activity resumes within the watershed and may be used in conjunction with a BMP effectiveness monitoring site in future Permit terms.

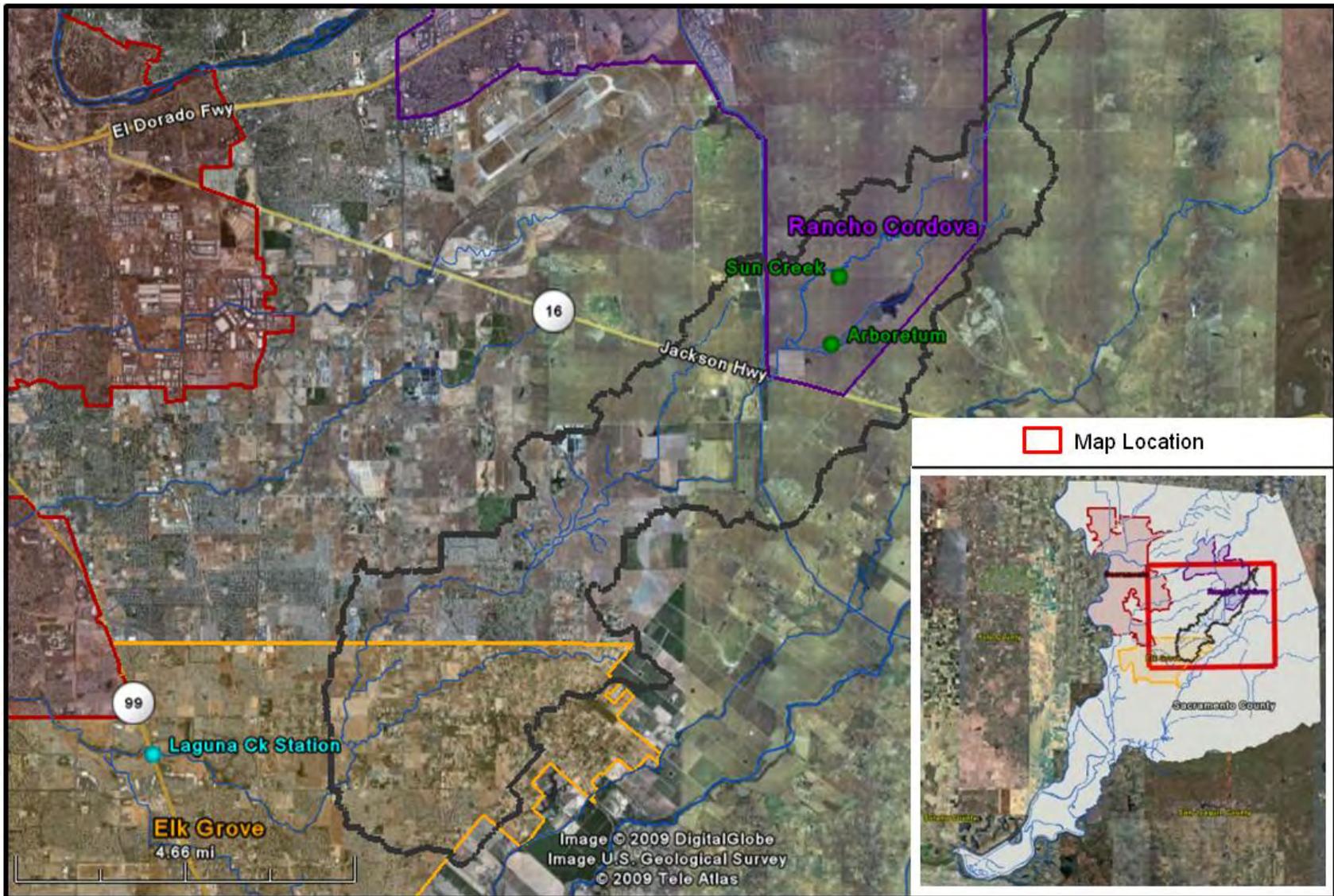


Figure 1. Upper Laguna Creek Watershed Candidate BMP Effectiveness Monitoring Sites

- | | | | |
|------------------------------|--------------------|-----------|-----------------------------|
| Upper Laguna Creek Watershed | Elk Grove | Waterbody | Proposed Development Sites |
| Rancho Cordova | City of Sacramento | Highway | Existing Monitoring Station |



Stormwater Monitoring

If selected, the BMP and receiving water site will be monitored for the constituents outlined in Table 1.

Table 1. Pilot Watershed New Development BMP Effectiveness Evaluation - Monitoring Constituents

Constituent	Method	ML	Units	Lab
Dissolved Oxygen	Field	Sensitivity to 5 mg/l	mg/L	field
pH	Field	0 - 14	std. Units	field
Temperature	Field	None	°C	field
E. coli	SM9221F	44	MPN/100mL	SCRCL
Fecal Coliform	SM9221E	49	MPN/100mL	SCRCL
Nitrate-Nitrite	EPA 353.2	0.1	mg/L	Caltest
Total Kjeldahl Nitrogen	EPA 351.3	0.1	mg/L	SCRCL
Total Hardness	EPA 130	2	mg/L	FGS
Total Phosphorus	EPA 365.2	0.05	mg/L	Caltest
Total Suspended Solids	EPA 160.2	2	mg/L	SCRCL
Mercury	CVAFS	0.5	ng/L	FGS
Methyl Mercury	CVAFS	0.05	ng/L	FGS
Pyrethroids	SW846 8270 (SIM)	0.01-0.05	µg/L	CRG
Total and Dissolved Copper, Lead, and Zinc	ICP/MS	0.1 to 5.0	µg/L	Caltest
Suspended Sediment Concentration (SSC)	ASTM 2000 D3977-Test Method C Wet Sieving Filtration	5.0	mg/L	CRG

Measuring BMP Effectiveness

BMP monitoring will be conducted at influent and effluent stations. Effectiveness of the BMP will be based on the following variables:

- Runoff volume reduction
- Volume of runoff treated (versus bypassed)
- Statistical difference in effluent quality compared to influent quality
- Distribution of effluent quality achieved

The Effluent Probability Method will be used to determine pollutant removal effectiveness. The Effluent Probability Method determines whether the influent and effluent mean EMCs are statistically different from one another and then examine either a cumulative distribution function of influent and effluent quality.

The entire BMP should be taken into account when measuring effectiveness. Overflow and bypassing of BMPs affect the long-term performance of the stormwater control measure. In order to accurately assess the efficiency of the BMP system, the bypass flow should be taken into

consideration. If possible, a third flow monitor may be installed to measure by-passed flow directly (ASCE, 2002).

SAMPLING PLAN

A sampling plan for compliance monitoring will be developed and submitted once a monitoring site has been selected. The plan will include specification of the following:

- Sampling Stations
- Sampling Protocols
- Event Preparation
- Personal Safety
- Quality Assurance/Quality Control
- Data Analysis and Reporting

TECHNICAL REPORT

A technical report will be submitted at the conclusion of the study describing the results of the water quality monitoring, BMP effectiveness and runoff reduction. The report will document installation and maintenance costs and make recommendations regarding future use and applicability of the BMP within the Sacramento Permittee area.

SCHEDULE

A schedule is provided in Table 2.

Table 2. Schedule for Pilot Watershed New Development BMP Effectiveness Evaluation

Task	Timeframe
Track development progress in Upper Laguna	Years 1 and 2
Identify an Upper Laguna BMP OR LID-type BMP outside of the Upper Laguna Creek watershed OR receiving water site	Year 3
Develop a SAP	Year 3
Monitor Effectiveness	Years 4 and 5
Develop summary Technical Report	Year 5

REFERENCES

American Society of Civil Engineers. 2002. Urban Stormwater BMP Performance Monitoring. Prepared for the US EPA. Available online: www.bmpdatabase.org.

MEMORANDUM



DATE: March 25, 2009

TO: Dave Tamayo, Sacramento County
Delia McGrath, City of Sacramento
Ken Ballard, Sacramento County

Brian M. Laurenson, P.E.
Steve Maricle

707 4th Street
Suite 200
Davis, CA 95616
530.753.6400 ext.230
530.753.7030 fax

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SUBJECT: **2009 TARGET POLLUTANT UPDATE**

The Sacramento Stormwater Quality Partnership (Partnership) identifies and prioritizes constituent-specific issues through a target pollutant evaluation process. The prioritized list of constituents is used by all Partnership agencies and Stormwater Program elements (e.g., Monitoring, Municipal, New Development, Public Outreach, etc.) to best focus their activities and resources.

This memorandum summarizes the procedure used in early 2009 to update the list according to the March 2001 guidance¹, and documents a program implementation processing step not included in the historic guidance. The purpose of the program implementation processing step is to organize the prioritized constituents for better implementation. In this final step, constituents with similar control or treatment approaches or those addressed through a regulatory or Partnership program are grouped together.

METHODS

The methodology for target pollutant identification and prioritization is presented in detail in the March 2001 guidance document. The four main tasks from that document can be summarized as:

1. Data preparation – compile organize and evaluate impairment listings, water quality, toxicity, and fish tissue data for Sacramento urban runoff and local receiving waters. Data compilation and analysis are summarized in the following attachments:
 - a. Attachment A – summary statistics, water quality objectives for all constituents
 - b. Attachment B – percent exceedance summaries for prioritized constituents

¹ Sacramento Stormwater Monitoring Program. *Target Pollutant Prioritization Procedure: Instructions and Year 2000 Update*. Prepared by Larry Walker Associates. Mach 2001.

- c. Attachment C – 303(d) listing status
 - d. Attachment D – summary of local TIE identification evaluation data
 - e. Attachment E – was not prepared in this revision as bioaccumulant issues were scored based on findings from a recent statewide study²
2. Potential target pollutant identification – identify potential target pollutants by answering a series of questions regarding impairment of receiving waters and identification in urban runoff. This evaluation is summarized in **Table 1**.
 3. Potential target pollutant scoring – score potential target pollutants based on numerical evaluation steps regarding exceedance of water quality objectives, listing status, etc. This evaluation is summarized in **Table 2**.
 4. Potential target pollutant ranking – rank based on scores from previous steps. This evaluation is summarized in **Table 3**.

The program implementation processing step is the (new) fifth step in target prioritization. The following evaluation steps are discussed in detail in this memorandum because they are not documented in the March 2001 guidance. This evaluation is summarized in **Table 4**.

Constituent Grouping

Constituents are grouped based on type of constituent, existing control programs (regulatory and Partnership, and anticipated control/treatment programs). The intent is to optimize the target pollutant list into logical groups that can be addressed by the Partnership in a unified manner (e.g., Drinking Water Initiative, Source Identification, pesticide, etc) rather than a more “fractured” constituent-by-constituent basis.

Partnership Work Status

This informational column identifies any completed or ongoing effort that the Partnership initiated or actively contributes.

Initial Scoring

This is the carryover score from the target pollutant scoring step (No. 3).

Initial Ranking Scoring Priority (scoring category No. 1)

A ranking from 1 to 5 is “High” priority, from 5 to 10 is “Medium” priority and everything else is “Low” priority.

RWQE (scoring category No. 2)

A “Yes” or “No” whether it was listed in a previous report of water quality exceedance (RWQE).

² State Water Resources Control Board, Surface Water Ambient Monitoring Program, *Bioaccumulation of Pollutants in California Waters: A Review of Historic Data and Assessment of Impacts on Fishing and Aquatic Life*, October 24, 2007.

Source Controllability (scoring category No. 3)

This step assesses whether the constituent can be further controlled at the source. Human applied pesticides and sediment/solids were listed as “High” controllability. Nutrients, total Hg, hydrocarbons and unidentified sources were listed as “Medium” controllability. Legacy pollutants, dissolved inorganics, TOC, pathogen indicators and PAHs were listed as “Low” controllability.

Urban Runoff Treatability (scoring category No. 4)

This step assesses the treatability of the constituent with available technologies. The more advanced the treatment requirement, the lower the treatability. Solids based constituents that can be removed with physical settling (e.g., extended detention basins) were listed as high. TOC, hydrocarbons, pathogen indicators and nutrients that would require specialized processes such (GAC) filtration, disinfection or nutrient removal were listed as “Medium” treatability. Dissolved and organic constituents that would require advanced filtration or reverse osmosis were listed as “Low” treatability.

Urban Runoff Impact on Beneficial Use (scoring category No. 5)

This step assesses whether the urban runoff constituent concentration/load has an impact on an existing beneficial use. The assessment is twofold in that both the relative contribution of urban runoff to other sources and whether the constituent is a strong indicator of beneficial use protection. The pesticides and sediment indicators were all listed as “High” impacts because the contribution from urban runoff is known to be high, and a receiving water is impaired as a result. TDS/EC, pathogen indicators, PAHs and bis(2ethylhexyl)phthalate were listed as “Medium” impacts because either the contribution from urban runoff is moderate or a receiving water is impaired as a result of urban runoff. The remaining constituents are listed as “Low” impacts because the contribution from urban runoff is negligible.

Composite Constituent Score Number

From the previous five scoring categories there are a total of four low-medium-high (1-2-3) scoring categories and one yes-no (0.5-0.0) scoring category. For each constituent the low-medium-high scores were averaged and added to the yes-no score for a maximum score of 3.5.

Composite Constituent Priority

For each constituent the score was then translated to an overall priority indicator:

2.5-3.5 - High

1.50-2.49 - Medium

<1.49 - Low

Composite Constituent Grouping Score

The individual constituent scores were averaged for each grouping.

Composite Constituent Grouping Priority

For each grouping the score was converted to an overall priority indicator:

2.5-3.5 - High

1.50-2.49 - Medium

<1.49 - Low

The suggested target pollutant groupings and priority levels are in **Table 5**.

Table 1: Potential Target Pollutant Identification Matrix

Table 1. Sacramento Stormwater Monitoring Program: Potential Target Pollutant Identification Matrix

Column A	Column B	Column C	Column D	Column E	Column F	Column G	Column H
Constituent	Has constituent been detected in Sacramento urban runoff?	Is the constituent listed as a source of impairment on local 303(d) listings (2008 draft update highlighted yellow)? [Add other 303(d) listed constituents for local or statewide water bodies that do not already appear in Column A of this matrix]	Has the constituent been demonstrated to cause acute or chronic toxicity in Sacramento urban runoff or receiving waters? [Add other constituents that do not already appear in Column A of this matrix as needed.]	Does the constituent have the potential to cause or contribute to the exceedance of standards in receiving waters?	Has the constituent been demonstrated or implicated to cause or contribute to the impairment of beneficial uses in the permitted area or downstream, including the Sacramento-San Joaquin Delta? [Add other constituents that do not already appear in Column A of this matrix as needed.]	Has the constituent been identified as a significant public, regulatory or Permittee concern that has yet to be adequately or completely addressed by draft or adopted Federal, State, or local water quality criteria or regulations? [Add other constituents that do not already appear in Column A of this matrix as needed.]	Based on the answers contained in Columns B through G of Table 1, should the constituent be scored and ranked? (Alternately, should the constituent be placed directly on the Tracking List or the Considered for Additional Monitoring List?)
1,1,1,2-Tetrachloroethane	NA	no	no	no	no	no	no
1,1,1-Trichloroethane	NA	no	no	no	no	no	no
1,1,2,2-Tetrachloroethane	NA	no	no	no	no	no	no
1,1,2-Trichloro-1,2,2-Trifluoroethane	NA	no	no	no	no	no	no
1,1,2-Trichloroethane	NA	no	no	no	no	no	no
1,1-Dichloroethane	NA	no	no	no	no	no	no
1,1-Dichloroethene	NA	no	no	no	no	no	no
1,1-Dichloropropene	NA	no	no	no	no	no	no
1,2,3,4-Tetramethylbenzene	NA	no	no	no	no	no	no
1,2,3,5-Tetramethylbenzene	NA	no	no	no	no	no	no
1,2,3-Trichlorobenzene	NA	no	no	no	no	no	no
1,2,3-Trichloropropane	NA	no	no	no	no	no	no
1,2,3-Trimethylbenzene	NA	no	no	no	no	no	no
1,2,4-Trichlorobenzene	YES	no	no	no	no	no	no
1,2,4-Trimethylbenzene	NA	no	no	no	no	no	no
1,2-Dibromo-3-Chloropropane	NA	no	no	no	no	no	no
1,2-Dibromoethane	NA	no	no	no	no	no	no
1,2-Dichlorobenzene	no	no	no	no	no	no	no
1,2-Dichloroethane	NA	no	no	no	no	no	no
1,2-Dichloropropane	NA	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

1,2-Dimethylbenzene	NA	no	no	no	no	no	no
1,2-Diphenylhydrazine	YES	no	no	no	no	no	no
1,3,5-Trimethylbenzene	NA	no	no	no	no	no	no
1,3-Dichlorobenzene	no	no	no	no	no	no	no
1,3-Dichloropropane	NA	no	no	no	no	no	no
1,4-Dichlorobenzene	YES	no	no	no	no	no	no
1,4-Dimethylbenzene	NA	no	no	no	no	no	no
1-Methylnaphthalene	YES	no	no	no (nc)	no	no	CAM
1-Methylphenanthrene	YES	no	no	no (nc)	no	no	CAM
2,2-Dichloropropane	NA	no	no	no	no	no	no
2,3,5-Trimethylnaphthalene	YES	no	no	no (nc)	no	no	CAM
2,4,5-T	no	no	no	no	no	no	no
2,4,5-TP (Silvex)	NA	no	no	no	no	no	no
2,4,5-Trichlorophenol	NA	no	no	no	no	no	no
2,4,6-Trichlorophenol	no	no	no	no	no	no	no
2,4-D	YES	no	no	no	no	no	no
2,4-DB	YES	no	no	no	no	no	no
2,4'-DDD	no	no	no	no	no	no	no
2,4'-DDE	no	no	no	no	no	no	no
2,4'-DDT	YES	YES	no	no (nc)	YES	no	YES
2,4-Dichlorophenol	YES	no	no	no	no	no	no
2,4-Dimethylphenol	no	no	no	no	no	no	no
2,4-Dinitrophenol	YES	no	no	no	no	no	no
2,4-Dinitrotoluene	no	no	no	no	no	no	no
2,6-Diethylaniline	NA	no	no	no	no	no	no
2,6-Dimethylnaphthalene	YES	no	no	no (nc)	no	no	CAM
2,6-Dinitrotoluene	no	no	no	no	no	no	no
2-Butanone	NA	no	no	no	no	no	no
2-Chloronaphthalene	no	no	no	no	no	no	no
2-Chlorophenol	no	no	no	no	no	no	no
2-Chlorotoluene	NA	no	no	no	no	no	no
2-Ethyltoluene	NA	no	no	no	no	no	no
2-Hexanone	NA	no	no	no	no	no	no
2-Methyl-4,6-dinitrophenol	YES	no	no	no	no	no	no
2-Methylnaphthalene	YES	no	no	no (nc)	no	no	CAM
2-Methylphenol	NA	no	no	no	no	no	no
2-Nitroaniline	NA	no	no	no	no	no	no
2-Nitrophenol	YES	no	no	no	no	no	no
2-Propenenitrile	NA	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

3,3'-Dichlorobenzidine	no	no	no	no	no	no	no
3-Chloro-1-Propene	NA	no	no	no	no	no	no
3-Hydroxycarbofuran	NA	no	no	no	no	no	no
3-Nitroaniline	NA	no	no	no	no	no	no
4,4'-DDD	no	no	no	no	no	no	no
4,4'-DDE	YES	no	no	no	no	no	no
4,4'-DDT	YES	YES	no	YES	YES	no	YES
4,6-Dinitro-2-Methylphenol	NA	no	no	no	no	no	no
4-Bromophenyl Phenyl Ether	no	no	no	no	no	no	no
4-Chloro-3-Methylphenol	no	no	no	no	no	no	no
4-Chloroaniline	NA	no	no	no	no	no	no
4-Chlorophenyl Phenyl Ether	no	no	no	no	no	no	no
4-Chlorotoluene	NA	no	no	no	no	no	no
4-Methyl-2-Pentanone	NA	no	no	no	no	no	no
4-Methylphenol	NA	no	no	no	no	no	no
4-Nitroaniline	NA	no	no	no	no	no	no
4-Nitrophenol	no	no	no	no	no	no	no
Acenaphthene	YES	no	no	YES	no	no	YES
Acenaphthylene	YES	no	no	no (nc)	no	no	CAM
Acetochlor	NA	no	no	no	no	no	no
Acetone	NA	no	no	no	no	no	no
Acifluorfen	NA	no	no	no	no	no	no
Alachlor	NA	no	no	no	no	no	no
Aldicarb	no	no	no	no	no	no	no
Aldicarb Sulfone	NA	no	no	no	no	no	no
Aldicarb Sulfoxide	NA	no	no	no	no	no	no
Aldrin	YES	no	no	YES	YES	no	YES
Alkalinity as CaCO3	no	no	no	no	no	no	no
Aluminum, Dissolved	YES	no	no	no	no	no	no
Aluminum, Total Recoverable	YES	no	no	no	no	no	no
Ametryn	no	no	no	no	no	no	no
Aminocarb	no	no	no	no	no	no	no
Ammonia as N	YES	no	no	no	no	no	no
Anthracene	YES	no	no	YES	no	no	YES
Antimony, Dissolved	YES	no	no	no	no	no	no
Antimony, Total Recoverable	YES	no	no	no	no	no	no
Aroclor 1016	no	no	no	no	no	no	no
Aroclor 1221	no	no	no	no	no	no	no
Aroclor 1232	no	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

Aroclor 1242	no	no	no	no	no	no	no
Aroclor 1248	no	no	no	no	no	no	no
Aroclor 1254	no	no	no	no	no	no	no
Aroclor 1260	no	no	no	no	no	no	no
Arsenic, Dissolved	YES	no	no	no	no	no	no
Arsenic, Total Recoverable	YES	no	no	no	no	no	no
Atraton	no	no	no	no	no	no	no
Atrazine	YES	no	no	no	no	no	no
Atrazine, Diethyl	NA	no	no	no	no	no	no
Azinphosmethyl	no	no	no	no	no	no	no
Azobenzene	no	no	no	no	no	no	no
Barban	no	no	no	no	no	no	no
Barium, Dissolved	NA	no	no	no	no	no	no
Benfluralin	NA	no	no	no	no	no	no
Benomyl (Carbendazim)	YES	no	no	no	no	no	no
Bentazon	NA	no	no	no	no	no	no
Benz(a)anthracene	YES	no	no	YES	no	no	YES
Benzene	no	no	no	no	no	no	no
Benzidine	no	no	no	no	no	no	no
Benzo(a)pyrene	YES	no	no	YES	no	no	YES
Benzo(b)fluoranthene	YES	no	no	YES	no	no	YES
Benzo(ghi)perylene	YES	no	no	YES	no	no	YES
Benzo(k)fluoranthene	YES	no	no	YES	no	no	YES
Benzoic acid	NA	no	no	no	no	no	no
Benzyl alcohol	NA	no	no	no	no	no	no
Beryllium, Dissolved	no	no	no	no	no	no	no
Beryllium, Total Recoverable	no	no	no	no	no	no	no
BHC, alpha	no	no	no	no	YES	no	no
BHC, beta	YES	no	no	no	YES	no	no [1]
BHC, delta	YES	no	no	no (nc)	YES	no	no [1]
BHC, gamma (Lindane)	no	no	no	YES	YES	no	YES
Biphenyl	YES	no	no	no (nc)	no	no	CAM
Bis(2-chloroethoxy)methane	YES	no	no	no	no	no	no
Bis(2-chloroethyl)ether	YES	no	no	no	no	no	no
Bis(2-chloroisopropyl)ether	no	no	no	no	no	no	no
Bis(2-ethylhexyl)phthalate	YES	YES	no	no	no	no	YES
BOD (5)	YES	no	no	no	no	no	no
Bolstar	no	no	no	no	no	no	no
Bromacil	YES	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

Bromobenzene	NA	no	no	no	no	no	no
Bromochloromethane	NA	no	no	no	no	no	no
Bromoethene	NA	no	no	no	no	no	no
Bromomethane	NA	no	no	no	no	no	no
Bromoxynil	NA	no	no	no	no	no	no
Butyl Benzyl Phthalate	YES	no	no	no	no	no	no
Butylate	NA	no	no	no	no	no	no
Cadmium, Dissolved	YES	no	no	no	no	no	no
Cadmium, Total Recoverable	YES	no	no	no	no	no	no
Calcium	NA	no	no	no	no	no	no
Calcium, Total	YES	no	no	no	no	no	no
Carbaryl	YES	no	no	no	no	no	no
Carbazole	NA	no	no	no	no	no	no
Carbofuran	YES	no	no	no	no	no	no
Carbon Disulfide	NA	no	no	no	no	no	no
Carbon, Dissolved Organic	YES	no	no	no (nc)	no	YES	no [1]
Carbon, Total Organic	YES	no	no	no (nc)	no	YES	YES
Chemical Oxygen Demand	YES	no	no	no	no	no	no
Chloramben	NA	no	no	no	no	no	no
Chlordane	YES	no	no	no	YES	no	YES
Chlordane, alpha	YES	no	no	no	no	no	no
Chlordane, gamma	YES	no	no	no	no	no	no
Chloride	NA	no	no	no	no	no	no
Chlorobenzene	NA	no	no	no	no	no	no
Chlorodibromomethane	NA	no	no	no	no	no	no
Chloroethane	NA	no	no	no	no	no	no
Chloroethene	NA	no	no	no	no	no	no
Chloromethane	NA	no	no	no	no	no	no
Chloropropham	NA	no	no	no	no	no	no
Chlorothalonil	NA	no	no	no	no	no	no
Chloroxuron	no	no	no	no	no	no	no
Chlorpyrifos	YES	YES	no	YES	YES	no	YES
Chromium, Dissolved	YES	no	no	no	no	no	no
Chromium, Total Recoverable	YES	no	no	no	no	no	no
Chrysene	YES	no	no	YES	no	no	YES
cis-1,2-Dichloroethene	NA	no	no	no	no	no	no
cis-1,3-Dichloropropene	NA	no	no	no	no	no	no
cis-Nonachlor	YES	no	no	no	no	no	no
Clopyralid	NA	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

Cobalt, Dissolved	NA	no	no	no	no	no	no
Copper, Dissolved	YES	YES	no	YES	no	no	YES
Copper, Total Recoverable	YES	YES	no	no	no	no	no [1]
Coumaphos	no	no	no	no	no	no	no
<i>Cryptosporidium</i>	NA	no	no	no	no	no	no
Cyanazine	no	no	no	no	no	no	no
Cyanide	no	no	no	no	no	no	no
Dalapon	no	no	no	no	no	no	no
DCEPA (Dacthal)	no	no	no	no	no	no	no
Def	no	no	no	no	no	no	no
Def/Merphos	no	no	no	no	no	no	no
Demeton-O	NA	no	no	no	no	no	no
Demeton-S	NA	no	no	no	no	no	no
Detergents/Surfactants	NA	no	no	no	no	no	no
Diazinon	YES	YES	no	YES	YES	no	YES
Dibenz(a,h)anthracene	YES	no	no	YES	no	no	YES
Dibenzofuran	NA	no	no	no	no	no	no
Dibenzothiophene	YES	no	no	no (nc)	no	no	CAM
Dibromomethane	NA	no	no	no	no	no	no
Dicamba	YES	no	no	no	no	no	no
Dichlobenil	NA	no	no	no	no	no	no
Dichlorobromomethane	NA	no	no	no	no	no	no
Dichlorodifluoromethane	NA	no	no	no	no	no	no
Dichloromethane	NA	no	no	no	no	no	no
Dichloroprop	YES	no	no	no	no	no	no
Dichlorvos	YES	no	no	no	no	no	no
Dicofol	no	no	no	no	no	no	no
Dieldrin	YES	YES	no	no	YES	no	YES
Diethyl Ether	NA	no	no	no	no	no	no
Diethyl Phthalate	YES	no	no	no	no	no	no
Diisopropyl Ether	NA	no	no	no	no	no	no
Dimethoate	YES	no	no	no	no	no	no
Dimethyl Phthalate	YES	no	no	no	no	no	no
Di-n-butyl Phthalate	YES	no	no	no	no	no	no
Di-n-octyl Phthalate	YES	no	no	no	no	no	no
Dinoseb	no	no	no	no	no	no	no
Diphenamid	no	no	no	no	no	no	no
Dissolved Oxygen	no	no	no	no	no	no	no
Dissolved Oxygen (field)	YES	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

Disulfoton	no	no	no	no	no	no	no
Diuron	YES	no	no	no	no	no	no
DNOC	NA	no	no	no	no	no	no
Endosulfan	NA	no	no	no	YES	no	CAM
Endosulfan sulfate	no	no	no	no	YES	no	no
Endrin	YES	no	no	no (nc)	YES	no	YES
Endrin aldehyde	no	no	no	no	no	no	no
Endrin ketone	no	no	no	no	no	no	no
EPN	no	no	no	no	no	no	no
EPTC/Eptam	NA	no	no	no	no	no	no
Escherichia Coli	YES	no	no	YES	no	YES	YES
Etazine	no	no	no	no	no	no	no
Ethalfuralin	NA	no	no	no	no	no	no
Ethion	no	no	no	no	no	no	no
Ethoprop	no	no	no	no	no	no	no
Ethyl Methacrylate	NA	no	no	no	no	no	no
Ethyl parathion	no	no	no	no	no	no	no
Ethyl Tert-butyl Ether	NA	no	no	no	no	no	no
Ethylbenzene	no	no	no	no	no	no	no
Fecal Coliform	YES	no	no	YES	no	YES	YES
Fecal <i>Streptococcus</i>	NA	no	no	no	no	no	no
Fensulfothion	no	no	no	no	no	no	no
Fenthion	no	no	no	no	no	no	no
Fenuron	no	no	no	no	no	no	no
Fluometuron	no	no	no	no	no	no	no
Fluoranthene	YES	no	no	YES	no	no	YES
Fluorene	YES	no	no	YES	no	no	YES
Fluoride, Total	YES	no	no	no	no	no	no
Fonofos	NA	no	no	no	no	no	no
<i>Giardia</i>	NA	no	no	no	no	no	no
Glyphosate	YES	no	no	no	no	no	no
Hardness as CaCO3	YES	no	no	no	no	no	no
Heptachlor	YES	no	no	no	YES	no	YES
Heptachlor Epoxide	no	no	no	no	YES	no	no
Hexachlorobenzene	YES	no	no	no	no	no	no
Hexachlorobutadiene	no	no	no	no	no	no	no
Hexachlorocyclopentadiene	no	no	no	no	no	no	no
Hexachloroethane	no	no	no	no	no	no	no
Indeno(1,2,3-cd)pyrene	YES	no	no	YES	no	no	YES

Table 1: Potential Target Pollutant Identification Matrix

Iodomethane	NA	no	no	no	no	no	no
Iron, Dissolved	YES	no	no	no	no	no	no
Iron, Total Recoverable	YES	no	no	no	no	no	no
Isophorone	YES	no	no	no	no	no	no
Isopropylbenzene	NA	no	no	no	no	no	no
Lead, Dissolved	YES	no	no	YES	no	no	YES
Lead, Total Recoverable	YES	no	no	YES	no	no	no [1]
Linuron	no	no	no	no	no	no	no
Magnesium, Total	YES	no	no	no	no	no	no
Malathion	YES	YES	no	no	no	no	YES
Manganese, Dissolved	NA	no	no	no	no	no	no
MBAS	YES	no	no	no	no	no	no
MCP	NA	no	no	no	no	no	no
MCPA	no	no	no	no	no	no	no
MCPP	no	no	no	no	no	no	no
Mercury, Dissolved	YES	no	no	no (nc)	no	no	CAM
Mercury, Total	YES	YES	no	YES	YES	YES	YES
Mercury, Total Methyl	YES	YES	no	no (nc)	YES	YES	YES
Merphos	no	no	no	no	no	no	no
Methidathion	YES	no	no	no	no	no	no
Methiocarb	no	no	no	no	no	no	no
Methomyl	no	no	no	no	no	no	no
Methoxychlor	no	no	no	no	no	no	no
Methyl Acrylate	NA	no	no	no	no	no	no
Methyl Acrylonitrile	NA	no	no	no	no	no	no
Methyl Methacrylate	NA	no	no	no	no	no	no
Methyl parathion	no	no	no	no	no	no	no
Methyl tert-butyl ether	no	no	no	no	no	no	no
Methyl Trithion	no	no	no	no	no	no	no
Methylbenzene	NA	no	no	no	no	no	no
Metolachlor	NA	no	no	no	no	no	no
Metribuzin	NA	no	no	no	no	no	no
Mevinphos	no	no	no	no	no	no	no
Mexacarbate	no	no	no	no	no	no	no
Mirex	no	no	no	no	no	no	no
Molinate	NA	no	no	no	no	no	no
Molybdenum, Dissolved	NA	no	no	no	no	no	no
Monuron	no	no	no	no	no	no	no
Naled	no	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

Naphthalene	YES	no	no	YES	no	no	YES
Napropamide	NA	no	no	no	no	no	no
n-Butylbenzene	NA	no	no	no	no	no	no
Neburon	no	no	no	no	no	no	no
Nickel, Dissolved	YES	no	no	no	no	no	no
Nickel, Total Recoverable	YES	no	no	no	no	no	no
Nitrate as N	YES	no	no	no	no	no	no
Nitrate plus Nitrite as N	YES	no	no	no	no	YES	YES
Nitrite as N	no	no	no	no	no	no	no
Nitrobenzene	YES	no	no	no	no	no	no
N-Nitrosodimethylamine	no	no	no	no	no	no	no
N-Nitrosodi-n-Propylamine	YES	no	no	no	no	no	no
N-Nitrosodiphenylamine	no	no	no	no	no	no	no
Norfluorazon	NA	no	no	no	no	no	no
n-Propylbenzene	NA	no	no	no	no	no	no
Oryzalin	YES	no	no	no	no	no	no
Oxamyl	no	no	no	no	no	no	no
Oxychlorane	no	no	no	no	no	no	no
Parathion	NA	no	no	no	no	no	no
Parathion, Ethyl	NA	no	no	no	no	no	no
Parathion, Methyl	NA	no	no	no	no	no	no
PCBs	NA	YES	no	no	YES	no	YES
Pebultate	NA	no	no	no	no	no	no
Pendimethalin	NA	no	no	no	no	no	no
Pentachlorophenol	YES	YES	no	YES	no	no	YES
Permethrin	NA	no	no	no	no	no	no
Perthane	no	no	no	no	no	no	no
Perylene	YES	no	no	no (nc)	YES	no	YES
pH	YES	no	no	no	no	no	no
pH (field)	YES	no	no	no	no	no	no
Phenanthrene	YES	no	no	YES	no	no	YES
Phenol	YES	no	no	no	no	no	no
Phenolics, Total	no	no	no	no	no	no	no
Phorate	no	no	no	no	no	no	no
Phosalone	no	no	no	no	no	no	no
Phosmet	no	no	no	no	no	no	no
Phosphate, Ortho as P	YES	no	no	no	no	no	no
Phosphorus, Dissolved	NA	no	no	no	no	no	no
Phosphorus, Total	YES	no	no	no (nc)	no	YES	YES

Table 1: Potential Target Pollutant Identification Matrix

Picloram	NA	no	no	no	no	no	no
p-Isopropyltoluene	NA	no	no	no	no	no	no
Potassium	NA	no	no	no	no	no	no
Potassium, Total	no						
Premetryn	no						
Prometon	YES	no	no	no	no	no	no
Prometryn	no						
Pronamide	NA	no	no	no	no	no	no
Propachlor	no						
Propanil	NA	no	no	no	no	no	no
Propargite	NA	no	no	no	no	no	no
Propazine	YES	no	no	no	no	no	no
Propham	no						
Propoxur	no						
Prowl	YES	no	no	no	no	no	no
Pyrene	YES	no	no	YES	no	no	YES
Pyrethroids	YES	YES	YES	no	no	YES	YES
Ronnel	no						
Secbumeton	no						
sec-Butylbenzene	NA	no	no	no	no	no	no
Selenium, Dissolved	YES	no	no	no	no	no	no
Selenium, Total Recoverable	YES	no	no	no	no	no	no
Siduron	no						
Silica as SiO2	NA	no	no	no	no	no	no
Silver, Dissolved	no						
Silver, Total Recoverable	YES	no	no	no	no	no	no
Simazine	YES	no	no	no	no	no	no
Simetryn	no						
Sodium, Dissolved	no						
Sodium, Total	no						
Solids, Total Dissolved	YES	no	no	YES	no	YES	YES
Solids, Total Suspended	YES	no	no	no (nc)	no	YES	YES
Specific Conductance	YES	no	no	YES	YES	YES	YES
Stirophos	no						
Styrene	NA	no	no	no	no	no	no
Sulfate	NA	no	no	no	no	no	no
Sulfide	no						
Sulfotepp	NA	no	no	no	no	no	no
Tebuthiuron	no						

Table 1: Potential Target Pollutant Identification Matrix

Temperature (field)	YES	no	no	no	no	no	no
Tepp	NA	no	no	no	no	no	no
Terbacil	NA	no	no	no	no	no	no
Terbufos	NA	no	no	no	no	no	no
Terbutylazine	no	no	no	no	no	no	no
Terbutryn	no	no	no	no	no	no	no
Tert-Amyl Methyl Ether	NA	no	no	no	no	no	no
Tert-Butylbenzene	NA	no	no	no	no	no	no
Tetrachloroethene	NA	no	no	no	no	no	no
Tetrachloromethane	NA	no	no	no	no	no	no
Tetrahydrofuran	NA	no	no	no	no	no	no
Thallium, Dissolved	no	no	no	no	no	no	no
Thallium, Total Recoverable	YES	no	no	no	no	no	no
Thiobencarb	NA	no	no	no	no	no	no
Tokuthion	no	no	no	no	no	no	no
Toluene	YES	no	no	no	no	no	no
Total Coliform	YES	no	no	YES	no	YES	no [1]
Total Detectable DDTs	YES	no	no	no	no	no	no
Total Detectable PAHs	no	no	no	no	YES	no	no
Total Detectable PCBs	YES	no	no	no	no	no	no
Total Kjeldahl Nitrogen as N	YES	no	no	no (nc)	no	YES	YES
Toxaphene	no	YES	no	no	YES	no	YES
TPH as Diesel	YES	YES	no	no (nc)	no	no	YES
TPH as Gasoline	YES	YES	no	no (nc)	no	no	YES
TPH as Motor Oil	YES	YES	no	no (nc)	no	no	YES
TPH-Diesel	no	YES	no	no	no	no	no
TPH-Gasoline	no	YES	no	no	no	no	no
TPH-Motor Oil	no	YES	no	no	no	no	no
trans-1,2-Dichloroethene	NA	no	no	no	no	no	no
trans-1,3-Dichloropropene	NA	no	no	no	no	no	no
trans-1,4-Dichloro-2-butene	NA	no	no	no	no	no	no
trans-Nonachlor	YES	no	no	no	no	no	no
Trash	NA	no	no	no	no	no	no
Triallate	NA	no	no	no	no	no	no
Tribromomethane	NA	no	no	no	no	no	no
Trichloroethene	NA	no	no	no	no	no	no
Trichlorofluoromethane	NA	no	no	no	no	no	no
Trichloromethane	NA	no	no	no	no	no	no
Trichloronate	no	no	no	no	no	no	no

Table 1: Potential Target Pollutant Identification Matrix

Triclopyr	NA	no	no	no	no	no	no
Trifluralin	no	no	no	no	no	no	no
Turbidity	YES	no	no	YES	no	no	YES
Uranium, Dissolved	NA	no	no	no	no	no	no
Xylenes	no	no	no	no	no	no	no
Zinc, Dissolved	YES	YES	no	YES	no	no	YES
Zinc, Total Recoverable	YES	YES	no	no	no	no	no [1]

Table 2: Potential Target Pollutant Scoring/Ranking Matrix

Table 2. Sacramento Stormwater Monitoring Program: Potential Target Pollutant Scoring/Ranking Matrix

Column A	Question #1	Question #2	Question #3	Question #4	Question #5	Question #6	Question #7	Question #8	Question #9	Column T												
Potential Target Pollutant	What is the TMDL priority schedule for the water body and pollutant/ stressor as specified on the 303(d) list? [In the case of multiple water bodies, use the highest priority schedule]. Weighted Score (wt. factor = 5)	Have TIE's found the target pollutant to be the cause of acute or chronic toxicity in Sacramento urban runoff from 2002-2008? Weighted Score (wt. factor = 3)	Have TIE's tests found the target pollutant to be the cause of acute or chronic toxicity in receiving waters in the permitted area from 2002-2008? Weighted Score (wt. factor = 3)	At what frequency has the target pollutant been found to exceed minimum relevant regulatory criteria in Sacramento urban runoff? Weighted Score (wt. factor = 10)	At what frequency has the target pollutant been found to exceed minimum applicable criteria in receiving waters in the permitted area from 2002-2008? Weighted Score (wt. factor = 10)	Has the target pollutant been demonstrated to bioaccumulate to detrimental levels in organisms living in receiving waters in the permitted area? Weighted Score (wt. factor = 3)	Has the target pollutant been found to cause or contribute to the impairment of beneficial uses in the permitted area or downstream, including the Sacramento-San Joaquin Delta? Weighted Score (wt. factor = 1)	Has the target pollutant been identified as a significant public, regulatory or Permittee concern that has yet to be adequately or completely addressed by draft or adopted Federal, State or local water quality criteria or regulations? Weighted Score (wt. factor = 1)	Has source of constituent been banned, widely reduced or restricted, and have monitoring results decreased in recent years? Weighted Score (wt. factor = 5)	Target Pollutant Composite Ranking Value												
Max. Raw Score/Max. Weighted Score	5	5	5	1	10	5	5	5	5	100 Point Max.												
					Sac R.	Amer R.	Arcade Ck	Willow Ck.	Morrison Ck.													
2,4'-DDT	1 [2008 draft]	0 [no data]	0 [no data]	0.00 [no data]	0 [no data]	1 [low]	3 [low]	1 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	9.0	
4,4'-DDT	1 [2008 draft]	0 [no data]	0 [no data]	0.13 [13.33%]	1.33 [0%]	1 [low]	3 [low]	1 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	11.0	
Acenaphthene	0 [not listed]	0 [no data]	0 [no data]	0.00 [0%]	0 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0.0
Aldrin	0 [not listed]	0 [no data]	0 [no data]	0.03 [3.33%]	0.33 [0%]	0 [no data]	1 [low]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	1.3
Aluminum, Dissolved	0 [not listed]	0 [no data]	0 [no data]	0.00 [0%]	0 [1.59%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0.0
Anthracene	0 [not listed]	0 [no data]	0 [no data]	0.00 [0%]	0 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0.0
Benz(a)anthracene	0 [not listed]	0 [no data]	0 [no data]	0.56 [55.93%]	5.59 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	7.4
Benzo(a)pyrene	0 [not listed]	0 [no data]	0 [no data]	0.51 [50.85%]	5.09 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	8.0
Benzo(b)fluoranthene	0 [not listed]	0 [no data]	0 [no data]	0.58 [57.63%]	5.76 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	8.8
Benzo(ghi)perylene	0 [not listed]	0 [no data]	0 [no data]	0.00 [no data]	0 [no data]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0.0
Benzo(k)fluoranthene	0 [not listed]	0 [no data]	0 [no data]	0.54 [54.24%]	5.42 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	8.2
BHC, gamma (Lindane)	0 [not listed]	0 [no data]	0 [no data]	0.00 [no data]	0 [0%]	0 [no data]	1 [low]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	1.2
Bis(2-ethylhexyl)phthalate	1 [2008 draft]	0 [no data]	0 [no data]	0.00 [no data]	0 [no data]	3 [medium]	9 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	14.0
Carbon, Total Organic	0 [not listed]	0 [no data]	0 [no data]	0.00 [no data]	0 [no data]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	3.0
Chlordane	1 [2008 draft]	0 [no data]	0 [no data]	0.00 [no data]	0 [no data]	1 [low]	3 [low]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	9.0
Chlorpyrifos	3 [medium]	0 [no data]	0 [no data]	0.07 [6.76%]	0.68 [0%]	0 [no data]	5 [high]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	5.7
Chrysene	0 [not listed]	0 [no data]	0 [no data]	0.49 [49.15%]	4.92 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	6.3
Copper, Dissolved	1 [low]	0 [no data]	0 [no data]	0.34 [33.9%]	3.39 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	9.5
Diazinon	3 [medium]	0 [no data]	0 [no data]	0.31 [31.08%]	3.11 [1.43%]	0 [no data]	5 [high]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	8.7
Dibenz(a,h)anthracene	0 [not listed]	0 [no data]	0 [no data]	0.20 [20.34%]	2.03 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	2.6
Dieldrin	1 [2008 draft]	0 [no data]	0 [no data]	0.00 [no data]	0 [no data]	0 [no data]	1 [low]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	6.0
Endrin	0 [not listed]	0 [no data]	0 [no data]	0.00 [0%]	0 [0%]	0 [no data]	1 [low]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	1.0
Escherichia Coli	0 [not listed]	0 [no data]	0 [no data]	0.93 [93.4%]	9.34 [13.49%]	0 [no data]	3 [medium]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	16.5
Fecal Coliform	0 [not listed]	0 [no data]	0 [no data]	0.95 [95.08%]	9.51 [11.9%]	0 [no data]	3 [medium]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	16.4
Fluoranthene	0 [not listed]	0 [no data]	0 [no data]	0.00 [0%]	0 [0%]	0 [no data]	0 [not listed]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0 [no known concern]	0.0

Table 2: Potential Target Pollutant Scoring/Ranking Matrix

Column A	Question #1	Question #2	Question #3	Question #4	Question #5	Question #6	Question #7	Question #8	Question #9	Column T											
Potential Target Pollutant	What is the TMDL priority schedule for the water body and pollutant/ stressor as specified on the 303(d) list? [In the case of multiple water bodies, use the highest priority schedule].	Have TIE's found the target pollutant to be the cause of acute or chronic toxicity in Sacramento urban runoff from 2002-2008?	Have TIE's tests found the target pollutant to be the cause of acute or chronic toxicity in receiving waters in the permitted area from 2002-2008?	At what frequency has the target pollutant been found to exceed minimum relevant regulatory criteria in Sacramento urban runoff?	At what frequency has the target pollutant been found to exceed minimum applicable criteria in receiving waters in the permitted area from 2002-2008?	Has the target pollutant been demonstrated to bioaccumulate to detrimental levels in organisms living in receiving waters in the permitted area?	Has the target pollutant been found to cause or contribute to the impairment of beneficial uses in the permitted area or downstream, including the Sacramento-San Joaquin Delta?	Has the target pollutant been identified as a significant public, regulatory or Permittee concern that has yet to be adequately or completely addressed by draft or adopted Federal, State or local water quality criteria or regulations?	Has source of constituent been banned, widely reduced or restricted, and have monitoring results decreased in recent years?	Target Pollutant Composite Ranking Value											
											Weighted Score (wt. factor = 5)	Weighted Score (wt. factor = 3)	Weighted Score (wt. factor = 3)	Weighted Score (wt. factor = 10)	Weighted Score (wt. factor = 10)	Weighted Score (wt. factor = 3)	Weighted Score (wt. factor = 1)	Weighted Score (wt. factor = 1)	Weighted Score (wt. factor = 5)		
Max. Raw Score/Max. Weighted Score	5	5	5	1	1	1	1	1	1	10	5	5	5	5	5	5	5	5	5	-15	100 Point Max.
Fluorene	0	0	0	0	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0
	[not listed]		[no data]		[0%]		[0%]		[0%]	[0%]	[0%]	[0%]	[0%]		[no data]		[not listed]		[no known concern]		
Heptachlor	0	0	0	0	0.00	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	1	1	0	0	0	1.0
	[not listed]		[no data]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]		[no data]		[low]		[no known concern]		
Indeno(1,2,3-cd)pyrene	0	0	0	0	0.41	4.07	0.00	0.04	0.80	0.00	0.50	1.86	0	0	0	0	0	0	0	0	5.9
	[not listed]		[no data]		[40.68%]		[0%]	[4.08%]	[80%]	[0%]	[50%]				[no data]		[not listed]		[no known concern]		
Lead, Dissolved	0	0	0	0	0.46	4.56	0.00	0.00	0.21	0.00	0.24	0.59	0	0	0	0	0	0	0	0	5.2
	[not listed]		[no data]		[45.6%]		[0%]	[0%]	[21.1%]	[0%]	[23.5%]				[no data]		[not listed]		[no known concern]		
Malathion	1	5	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	5.0
	[2008 draft]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[no known concern]		
Mercury, Total	5	25	0	0	0.11	1.13	0.00	0.01	0.50	0.00	0.00	1.35	0	0	0	0	5	5	0	0	32.5
	[high]		[no data]		[11.29%]		[0%]	[0.71%]	[50%]	[50%]	[0%]				[no data]		[not listed]		[high]		
Mercury, Total Methyl	5	25	0	0	0.98	9.84	0.69	0.36	1.00	1.00	1.00	7.17	5	15	0	0	5	5	0	0	62.0
	[high]		[no data]		[98.35%]		[69.39%]	[36.4%]	[100%]	[100%]	[100%]				[high]		[not listed]		[high]		
Naphthalene	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[no known concern]		
Nitrate plus Nitrite as N	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	3	3	0	0	3.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[medium]		
PCBs	1	5	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	3	9	1	1	0	0	0	0	15.0
	[low]		[no data]		[no data]		[0%]	[0%]	[0%]	[0%]	[0%]				[medium]		[low]		[no known concern]		
Pentachlorophenol	1	5	0	0	0.12	1.19	0.00	0.00	0.20	0.00	0.75	1.27	1	3	0	0	0	0	0	0	10.5
	[2008 draft]		[no data]		[11.86%]		[0%]	[0%]	[20%]	[0%]	[75%]				[low]		[not listed]		[no known concern]		
Perylene	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[no known concern]		
Phenanthrene	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[no known concern]		
Phosphorus, Total	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	3	3	0	0	3.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[medium]		
Pyrene	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0.0
	[not listed]		[no data]		[0%]		[0%]	[0%]	[0%]	[0%]	[0%]				[no data]		[not listed]		[no known concern]		
Pyrethroids	1	5	5	15	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	5	5	0	0	40.0
	[2008 draft]				[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[high]		
Solids, Total Dissolved	0	0	0	0	0.37	3.73	0.27	0.02	0.40	0.80	0.50	3.13	0	0	0	0	3	3	0	0	9.9
	[not listed]		[no data]		[37.29%]		[27.33%]	[1.56%]	[40%]	[80%]	[50%]				[no data]		[not listed]		[medium]		
Solids, Total Suspended	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	3	3	0	0	3.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[medium]		
Specific Conductance	0	0	0	0	0.35	3.48	0.04	0.00	0.19	0.42	0.19	1.19	0	0	1	1	3	3	0	0	8.7
	[not listed]		[no data]		[34.78%]		[3.85%]	[0%]	[19.44%]	[42.11%]	[19.15%]				[no data]		[low]		[medium]		
Total Kjeldahl Nitrogen as N	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	3	3	0	0	3.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[medium]		
Toxaphene	0	0	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	1	1	0	0	0	1.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[low]		[no known concern]				
TPH as Diesel	1	5	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	5.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[no known concern]		
TPH as Gasoline	1	5	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	5.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[no known concern]		
TPH as Motor Oil	1	5	0	0	0.00	0	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	5.0
	[not listed]		[no data]		[no data]		[no data]	[no data]	[no data]	[no data]	[no data]				[no data]		[not listed]		[no known concern]		
Turbidity	0	0	0	0	0.09	0.91	0.03	0.00	0.80	0.00	0.00	1.15	0	0	0	0	0	0	0	0	2.1
	[not listed]		[no data]		[9.09%]		[2.7%]	[0%]	[80%]	[0%]	[0%]				[no data]		[not listed]		[no known concern]		
Zinc, Dissolved	1	5	0	0	0.26	2.56	0.00	0.00	0.09	0.00	0.18	0.35	0	0	0	0	0	0	0	0	7.9
	[low]		[no data]		[25.6%]		[0%]	[0%]	[8.8%]	[0%]	[17.6%]				[no data]		[not listed]		[no known concern]		

Table 2: Potential Target Pollutant Scoring/Ranking Matrix

Column A	Question #1	Question #2	Question #3	Question #4	Question #5					Question #6	Question #7	Question #8	Question #9	Column T				
Potential Target Pollutant	What is the TMDL priority schedule for the water body and pollutant/ stressor as specified on the 303(d) list? [In the case of multiple water bodies, use the highest priority schedule].	Have TIE's found the target pollutant to be the cause of acute or chronic toxicity in Sacramento urban runoff from 2002-2008?	Have TIE's tests found the target pollutant to be the cause of acute or chronic toxicity in receiving waters in the permitted area from 2002-2008?	At what frequency has the target pollutant been found to exceed minimum relevant regulatory criteria in Sacramento urban runoff?	At what frequency has the target pollutant been found to exceed minimum applicable criteria in receiving waters in the permitted area from 2002-2008?					Has the target pollutant been demonstrated to bioaccumulate to detrimental levels in organisms living in receiving waters in the permitted area?	Has the target pollutant been found to cause or contribute to the impairment of beneficial uses in the permitted area or downstream, including the Sacramento-San Joaquin Delta?	Has the target pollutant been identified as a significant public, regulatory or Permittee concern that has yet to be adequately or completely addressed by draft or adopted Federal, State or local water quality criteria or regulations?	Has source of constituent been banned, widely reduced or restricted, and have monitoring results decreased in recent years?	Target Pollutant Composite Ranking Value				
	Weighted Score (wt. factor = 5)	Weighted Score (wt. factor = 3)	Weighted Score (wt. factor = 3)	Weighted Score (wt. factor = 10)	Weighted Score (wt. factor = 10)	Weighted Score (wt. factor = 3)	Weighted Score (wt. factor = 1)	Weighted Score (wt. factor = 1)	Weighted Score (wt. factor = 1)	Weighted Score (wt. factor = 5)								
Max. Raw Score/Max. Weighted Score	5	5	5	1	10	1	1	1	1	1	10	5	15	5	5	5	-15	100 Point Max.
						Sac R.	Amer R.	Arcade Ck	Willow Ck.	Morrison Ck.								

Notes:

Question #6 references attachment E from a 1995 aquatic tissue study and a 2007 study done for California Waterboards titled: Bioaccumulation of Pollutants in California Waters: A Review of Historic Data and Assessment of Impacts on Fishing and Aquatic Life

Table 3.

**Sacramento Stormwater Monitoring Program
Target Pollutant Prioritization**

Scored and Ranked Potential Target Pollutants

Rank	Constituent	Target Pollutant Composite Ranking Value
1	Mercury, Total Methyl	62.0
2	Pyrethroids	40.0
3	Mercury, Total	32.5
4	Escherichia Coli	16.5
5	Fecal Coliform	16.4
6	PCBs	15.0
7	Bis(2-ethylhexyl)phthalate	14.0
8	Pentachlorophenol	10.5
9	Solids, Total Dissolved	9.9
10	Copper, Dissolved	9.5
11	Chlordane	9.0
12	Diazinon	8.7
13	Specific Conductance	8.7
14	Benzo(k)fluoranthene	8.2
15	Zinc, Dissolved	7.9
16	Chrysene	6.3
17	Dieldrin	6.0
18	Indeno(1,2,3-cd)pyrene	5.9
19	Chlorpyrifos	5.7
20	Lead, Dissolved	5.2
21	Malathion	5.0
21	TPH as Diesel	5.0
21	TPH as Gasoline	5.0
21	TPH as Motor Oil	5.0
25	Carbon, Total Organic	3.0
25	Nitrate plus Nitrite as N	3.0
25	Phosphorus, Total	3.0
25	Total Kjeldahl Nitrogen as N	3.0
25	Solids, Total Suspended	3.0
30	Dibenz(a,h)anthracene	2.6
31	Turbidity	2.1
32	BHC, gamma (Lindane)	1.2
33	Endrin	1.0
33	Heptachlor	1.0
33	Toxaphene	1.0
36	Fluoranthene	0.0
36	Fluorene	0.0
36	Naphthalene	0.0
36	Perylene	0.0
36	Phenanthrene	0.0
36	Pyrene	0.0

Table 4.

Sacramento Stormwater Monitoring Program
Target Pollutant Prioritization

Potential Target Pollutant Groups Prioritization

Constituent	Constituent Grouping	Partnership Work Status	Initial Scoring	Initial Ranking	Scoring Priority	RWQE	Source Controllability	Urban Runoff Treatability	Urban Runoff Impact on Beneficial Use	Composite Constituent Score	Composite Constituent Priority	Composite Constituent Grouping Score	Composite Constituent Grouping Priority		
Solids, Total Dissolved	Drinking Water Issue	DW Basin Plan Amendment Process	9.9	9	Medium	Yes	Low	Low	Medium	2	Medium	1.58	Medium		
Specific Conductance	Drinking Water Issue	DW Basin Plan Amendment Process	8.7	13	Low	Yes	Low	Low	Medium	1.75	Medium				
Carbon, Total Organic	Drinking Water Issue	DW Basin Plan Amendment Process	3.0	25	Low	No	Low	Medium	Low	1.25	Low				
Nitrate plus Nitrite as N	Drinking Water Issue	DW Basin Plan Amendment Process	3.0	25	Low	No	Medium	Medium	Low	1.5	Low				
Phosphorus, Total	Drinking Water Issue	DW Basin Plan Amendment Process	3.0	25	Low	No	Medium	Medium	Low	1.5	Low				
Total Kjeldahl Nitrogen as N	Drinking Water Issue	DW Basin Plan Amendment Process	3.0	25	Low	No	Medium	Medium	Low	1.5	Low				
PCBs	Legacy Pollutant	Expected TMDL	15.0	6	Medium	No	Low	Low	Low	1.25	Low	1.13	Low		
Chlordane	Legacy Pollutant	Expected TMDL	9.0	11	Low	No	Low	Low	Low	1	Low				
Dieldrin	Legacy Pollutant	Expected TMDL	6.0	17	Low	No	Low	Low	Low	1	Low				
BHC, gamma (Lindane)	Legacy Pollutant	Ongoing Characterization	1.2	32	Low	Yes	Low	Low	Low	1.5	Low				
Endrin	Legacy Pollutant	Ongoing Characterization	1.0	33	Low	No	Low	Low	Low	1	Low				
Heptachlor	Legacy Pollutant	Ongoing Characterization	1.0	33	Low	No	Low	Low	Low	1	Low				
Copper, Dissolved	Metal	Work Plan Complete	9.5	10	Medium	Yes	Low	Low	Low	1.75	Medium	1.58	Medium		
Lead, Dissolved	Metal	Work Plan Complete	5.2	20	Low	Yes	Low	Low	Low	1.5	Low				
Zinc, Dissolved	Metal	Work Plan Complete	7.9	15	Low	Yes	Low	Low	Low	1.5	Low				
Mercury, Total Methyl	Mercury	Draft TMDL	62.0	1	High	No	Medium	Low	Low	1.75	Medium	2.25	Medium		
Mercury, Total	Mercury	Draft TMDL	32.5	3	High	Yes	Medium	High	Low	2.75	High				
Benzo(k)fluoranthene	PAH	Ongoing Characterization	8.2	14	Low	Yes	Low	Low	Medium	1.75	Medium	1.75	Medium		
Chrysene	PAH	Ongoing Characterization	6.3	16	Low	Yes	Low	Low	Medium	1.75	Medium				
Indeno(1,2,3-cd)pyrene	PAH	Ongoing Characterization	5.9	18	Low	Yes	Low	Low	Medium	1.75	Medium				
Dibenz(a,h)anthracene	PAH	Ongoing Characterization	2.6	30	Low	Yes	Low	Low	Medium	1.75	Medium				
Toxaphene	PAH	Ongoing Characterization	1.0	33	Low	Yes	Low	Low	Medium	1.75	Medium				
Fluoranthene	PAH	Ongoing Characterization	0.0	36	Low	Yes	Low	Low	Medium	1.75	Medium				
Fluorene	PAH	Ongoing Characterization	0.0	36	Low	Yes	Low	Low	Medium	1.75	Medium				
Naphthalene	PAH	Ongoing Characterization	0.0	36	Low	Yes	Low	Low	Medium	1.75	Medium				
Perylene	PAH	Ongoing Characterization	0.0	36	Low	Yes	Low	Low	Medium	1.75	Medium				
Phenanthrene	PAH	Ongoing Characterization	0.0	36	Low	Yes	Low	Low	Medium	1.75	Medium				
Pyrene	PAH	Ongoing Characterization	0.0	36	Low	Yes	Low	Low	Medium	1.75	Medium				
Escherichia Coli	Pathogen Indicator	Work Plan Complete	16.5	4	High	Yes	Low	Medium	Medium	2.5	Medium			2.50	Medium
Fecal Coliform	Pathogen Indicator	Work Plan Complete	16.4	5	High	Yes	Low	Medium	Medium	2.5	Medium				
Pyrethroids	Pesticide	Expected TMDL	40.0	2	High	No	High	Low	High	2.5	Medium	2.30	Medium		
Malathion	Pesticide	Expected TMDL	5.0	21	Low	No	High	Low	High	2	Medium				
Diazinon	Pesticide	TMDL Complete	8.7	12	Low	Yes	High	Low	High	2.5	Medium				
Chlorpyrifos	Pesticide	TMDL Complete	5.7	19	Low	Yes	High	Low	High	2.5	Medium				
Pentachlorophenol	Pesticide	Ongoing Characterization	10.5	8	Medium	Yes	Medium	Low	Low	2	Medium				
Solids, Total Suspended	Sediment Erosion	Hydromodification program	3.0	25	Low	No	High	High	High	2.5	Medium	2.75	High		
Turbidity	Sediment Erosion	Hydromodification program	2.1	31	Low	Yes	High	High	High	3	High				
Bis(2-ethylhexyl)phthalate	Unquantified Source	None	14.0	7	Medium	No	Medium	Low	Medium	1.75	Medium	1.75	Medium		
TPH as Diesel	Petroleum Product	Ongoing Characterization	5.0	21	Low	No	Medium	Medium	Low	1.5	Low				
TPH as Gasoline	Petroleum Product	Ongoing Characterization	5.0	21	Low	No	Medium	Medium	Low	1.5	Low				
TPH as Motor Oil	Petroleum Product	Ongoing Characterization	5.0	21	Low	No	Medium	Medium	Low	1.5	Low				

Table 5.

**Sacramento Stormwater Monitoring Program
Target Pollutant Prioritization**

Prioritized Target Pollutant Groups

Target Pollutant Group	Priority
Sediment Erosion	High
Pathogen Indicator	Medium
Pesticide	Medium
Mercury	Medium
PAH	Medium
Unquantified Source	Medium
Drinking Water Issue	Medium
Metal	Medium
Petroleum Product	Low
Legacy Pollutant	Low

Attachment A. Summary Statistics and Minimum Relevant Regulatory Criteria for Pollutants/Stressors Evaluated in Potential Target Pollutant Identification and Scoring/Ranking Matrices

Constituent	Was the constituent specified in the most recent SMP Prioritized Target Pollutant List or Tracking List?	n	Frequency (%) of detection in Sacramento urban runoff (detection limit range)	Range of Sacramento Urban Runoff Reporting Limits	Range of Sacramento Urban Runoff Detected Values	Units	n	Frequency (%) of detection in Urban Tributaries (detection limit range)	Range of Urban Tributaries Reporting Limits	Range of Urban Tributaries Detected Values	Units	n	Frequency (%) of detection in American River (detection limit range)	Range of American River Reporting Limits	Range of American River Detected Values	n	Frequency (%) of detection in Sacramento River (detection limit range)	Range of Sacramento River Reporting Limits	Range of Sacramento River Detected Values	Minimum Water Quality Criterion	Source of Criterion	Are detection limits below criterion?
1,2,4-Trichlorobenzene	yes	59	5.08%	10-50	12.3-25	ng/L	14	ND	10-10	n/a	ng/L	98	3.06%	163	10-10	100	2.00%	163	10-11	5	SSQP	yes
1,2-Dichlorobenzene	yes	59	ND	10-50	n/a	ng/L	14	ND	10-10	n/a	ng/L	118	0.85%	0.17-62.5	89-89	142	ND	0.17-62.5	ND	600	SSQP	yes
1,2-Diphenylhydrazine	no	3	33.33%	5-5	11-11	ng/L	0	no data	0-0	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
1,3-Dichlorobenzene	yes	59	ND	10-50	n/a	ng/L	14	ND	10-10	n/a	ng/L	118	ND	0.1-62.5	ND	142	ND	0.1-62.5	ND	400	SSQP	yes
1,4-Dichlorobenzene	yes	59	1.69%	10-50	0.03-0.03	ng/L	14	ND	10-10	n/a	ng/L	118	0.85%	0.19-62.5	161-161	142	3.52%	0.19-62.5	11-44.7	5	SSQP	yes
1-Methylnaphthalene	no	59	72.88%	1-5	1.1-47	ng/L	14	85.71%	1-1	1.8-85.5	ng/L	90	28.89%	1-5	1.5-1	89	25.84%	1-5	12-9.8	none		no criterion
1-Methylphenanthrene	no	59	45.76%	1-5	2.7-56.5	ng/L	14	28.57%	1-1	5.9-35	ng/L	90	5.56%	1-5	1.5-3.6	89	4.49%	1-5	1.2-8.5	none		no criterion
2,3,5-Trimethylnaphthalene	no	59	16.95%	1-5	3.4-60.1	ng/L	14	35.71%	1-1	2.4-43.5	ng/L	90	8.89%	1-5	1.5-11	89	3.37%	1-5	1.4-6.4	none		no criterion
2,4,5-T	yes	45	ND	0.1-0.5	n/a	µg/L	15	ND	0.03-0.2	n/a	µg/L	52	ND	0.03-0.2	ND	34	ND	0.03-0.1	ND	50	SSQP	yes
2,4,5-TP	yes	45	ND	0.1-0.5	n/a	ng/L	15	ND	0.07-0.2	n/a	ng/L	62	ND	0.07-0.2	ND	42	ND	0.07-0.12	ND	none		no criterion
2,4,6-Trichlorophenol	yes	59	ND	50-100	n/a	ng/L	14	ND	0.05-50	n/a	ng/L	91	ND	0.37-100	ND	97	1.03%	0.34-100	2.8-2.8	2.1	SSQP	yes
2,4-D	yes	45	40.00%	0.02-2.5	0.24-4.2	ng/L	15	53.33%	0.15-1	0.14-0.68	ng/L	62	ND	0.15-1	ND	42	2.38%	0.15-0.6	0.29-0.29	7.0	SSQP	yes
2,4-DB	yes	45	2.22%	1-5	1.3-1.3	µg/L	15	33.33%	0.23-2	0.44-2.1	µg/L	52	ND	0.23-2	ND	34	ND	0.23-1	ND	none		no criterion
2,4-DDD	no	14	ND	1-5	n/a	ng/L	10	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
2,4-DDE	no	14	ND	1-5	n/a	ng/L	10	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
2,4-DDT	no	14	ND	1-5	n/a	ng/L	10	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
2,4-Dichlorophenol	yes	59	5.08%	50-100	15-89	ng/L	14	ND	50-50	n/a	ng/L	95	ND	1100	ND	98	ND	1100	ND	93	SSQP	yes
2,4-Dimethylphenol	yes	59	ND	100-200	n/a	ng/L	14	ND	100-100	n/a	ng/L	95	ND	1200	ND	98	ND	1200	ND	540	SSQP	yes
2,4-Dinitrophenol	yes	59	11.86%	100-200	159-1618	ng/L	14	35.71%	100-100	125-1494	ng/L	95	ND	5200	ND	98	ND	5200	ND	70	SSQP	yes
2,4-Dinitrotoluene	yes	59	ND	50-100	n/a	ng/L	14	ND	50-50	n/a	ng/L	98	ND	1100	ND	100	ND	1100	ND	none		no criterion
2,6-Dimethylnaphthalene	no	59	40.68%	1-5	2.179.9	ng/L	14	64.29%	1-1	2.92.8	ng/L	92	26.09%	1-5	1.9-9	91	21.98%	1-5	1-3.6	none		no criterion
2,6-Dinitrotoluene	yes	59	ND	50-100	n/a	ng/L	14	ND	50-50	n/a	ng/L	98	ND	1100	ND	100	ND	1100	ND	none		no criterion
2-Chloronaphthalene	yes	59	ND	50-100	n/a	ng/L	14	ND	50-50	n/a	ng/L	98	ND	1100	ND	100	ND	1100	ND	none		no criterion
2-Chlorophenol	yes	59	ND	50-100	n/a	ng/L	14	ND	50-50	n/a	ng/L	95	ND	1100	ND	98	ND	1100	ND	120	SSQP	yes
2-Methyl-4,6-dinitrophenol	no	59	15.25%	100-500	104-355	ng/L	14	14.29%	100-100	185-295	ng/L	85	ND	10200	ND	84	ND	10200	ND	none		no criterion
2-Methylnaphthalene	yes	59	76.27%	1-5	1.9-85.1	ng/L	14	92.86%	1-1	1.4-129	ng/L	98	32.65%	1-20	1.4-7.5	100	27.00%	1-20	1.2-10.1	none		no criterion
2-Nitrophenol	yes	59	11.86%	100-200	137-1030	ng/L	14	28.57%	100-100	101-226	ng/L	93	ND	1200	ND	96	ND	1200	ND	none		no criterion
3,3'-Dichlorobenzidine	yes	59	ND	50-100	n/a	ng/L	14	ND	50-50	n/a	ng/L	98	ND	2100	ND	100	ND	2100	ND	none		no criterion
4,4-DD	no	60	ND	1-50	n/a	ng/L	35	ND	1-10	n/a	ng/L	22	ND	no data	ND	12	ND	no data	ND	0.83	SSQP	yes
4,4'-DDE	yes	60	1.67%	1-50	34.2-34.2	ng/L	35	ND	1-10	n/a	ng/L	28	ND	1	ND	18	ND	1	ND	0.59	SSQP	yes
4,4'-DDT	yes	60	13.33%	1-50	14-30	ng/L	35	8.57%	1-10	10-50	ng/L	28	ND	1	ND	18	ND	1	ND	0.59	SSQP	yes
4-Bromophenyl phenyl ether	yes	59	ND	50-100	n/a	ng/L	14	ND	50-50	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
4-Chloro-3-methylphenol	yes	59	ND	100-200	n/a	ng/L	14	ND	100-100	n/a	ng/L	95	ND	2200	ND	98	ND	2200	ND	none		no criterion
4-Chlorophenyl phenyl ether	yes	56	ND	50-100	n/a	ng/L	14	ND	50-50	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
4-Nitrophenol	yes	59	ND	100-200	n/a	ng/L	14	7.14%	100-100	164-164	ng/L	95	ND	5200	ND	98	ND	5200	ND	none		no criterion
Acenaphthene	yes	59	35.59%	1-5	1.9-295	ng/L	14	35.71%	1-1	5.5-42.5	ng/L	98	7.14%	0.37-10.1	1.4-13.4	102	9.80%	0.32-20	0.39-71.5	none		no criterion
Acenaphthylene	yes	59	33.30%	1-5	2.6-16.4	ng/L	14	21.43%	1-1	2.3-25	ng/L	98	5.10%	1-20	1.4-2.1	100	5.00%	1-20	1-23.2	1200	SSQP	yes
Aldicarb	yes	60	ND	0.4-0.4	n/a	ng/L	14	ND	0.2-0.4	n/a	ng/L	84	ND	0.2-1	ND	85	ND	0.2-1	ND	0.13	SSQP	yes
Aldrin	yes	60	3.33%	1-50	4-36	ng/L	35	ND	1-10	n/a	ng/L	65	ND	1	ND	47	ND	1	ND	0.13	SSQP	yes
Alkalinity as CaCO3	no	0	no data	0-0	n/a	mg/L	0	100.00%	0-0	10-150	mg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Aluminum, Dissolved	yes	6	100.00%	0-0	30.8-77.5	ng/L	6	100.00%	0-0	19.1-195	ng/L	65	75.38%	2.8-12	1.2-119	63	80.95%	3.4-16.9	5.6-260	200	SSQP	yes
Aluminum, Total	no	6	100.00%	0-0	1160-6520	ng/L	6	100.00%	0-0	937-5640	ng/L	82	91.46%	1.28-143	18-2250	75	97.33%	4-4	4-9090	200	SSQP	yes
Ametryn	no	45	ND	5-500	n/a	ng/L	15	ND	5-500	n/a	ng/L	62	ND	0.09-0.5	ND	43	ND	0.09-0.5	ND	none		no criterion
Aminocarb	yes	60	ND	0.4-0.4	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	83	ND	0.2-1	ND	85	ND	0.2-1	ND	none		no criterion
Ammonia as N	yes	15	100.00%	0-0	0.2-1.2	µg/L	0	no data	0-0	n/a	µg/L	124	12.10%	0.04-0.14	0.02-0.24	141	29.08%	0.03-0.39	0.03-0.42	none		no criterion
Antrazene	yes	59	50.85%	1-5	2.02-303	µg/L	14	71.43%	1-1	3.3-35	µg/L	104	2.88%	0.13-20	1.2-1.6	108	4.83%	0.1-20	0.12-1.5	9600	SSQP	yes
Antimony, Dissolved	yes	6	100.00%	0-0	0.4-2.68	µg/L	6	100.00%	0-0	0.21-2.78	µg/L	4	75.00%	0.01-0.01	0.03-0.11	14	92.86%	0.05-0.05	0.05-0.09	6	SSQP	yes
Antimony, Total Recoverable	no	6	100.00%	0-0	0.86-2.66	µg/L	6	100.00%	0-0	0.24-2.53	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Aroclor 1016	no	6	ND	10-10	n/a	ng/L	8	ND	10-10	n/a	ng/L	4	ND	0.1-10	ND	4	ND	0.1-10	ND	none		no criterion
Aroclor 1221	no	6	ND	10-10	n/a	ng/L	8	ND	10-10	n/a	ng/L	4	ND	0.1-10	ND	4	ND	0.1-10	ND	none		no criterion
Aroclor 1232	no	6	ND	10-10	n/a	ng/L	8	ND	10-10	n/a	ng/L	4	ND	0.1-10	ND	4	ND	0.1-10	ND	none		no criterion
Aroclor 1242	no	6	ND	10-10	n/a	ng/L	8	ND	10-10	n/a	ng/L	4	ND	0.1-10	ND	4	ND	0.1-10	ND	none		no criterion
Aroclor 1248	no	6	ND	10-10	n/a	ng/L	8	ND	10-10	n/a	ng/L	4	ND	0.1-10	ND	4	ND	0.1-10	ND	none		no criterion
Aroclor 1254	no	6	ND	10-10	n/a	ng/L	8	ND	10-10	n/a	ng/L	4	ND	0.1-10	ND	4	ND	0.1-10	ND	none		no criterion
Aroclor 1260	no	6	ND	10-10	n/a	ng/L	8	ND	10-10	n/a	ng/L	4	ND	0.1-10	ND	4	ND	0.1-10	ND	none		no criterion
Arsenic, Dissolved	yes	60	98.33%	0.05-0.05	0.45-6.99	µg/L	12	100.00%	0-0	1.03-3.2	µg/L	82	87.80%	0.15-0.46	0.16-1.82	79	100.00%	no data	0.29-2.31	none		no criterion
Arsenic, Total	no	3	100.00%	0-0	1.16-4.33	µg/L	2	100.00%	0-0	3.16-3.42	µg/L	101	82.18%	0.04-1	0.21-2.9							

Attachment A: Summary Statistics and Minimum Relevant Regulatory Criteria

Bis(2-chloroethyl)ether	yes	59	3.39%	0.05-0.1	0.16-0.21	µg/L	14	ND	0.05-0.05	n/a	µg/L	98	ND	1100	ND	99	ND	1100	ND	0.31	SSQP	yes
Bis(2-chloroisopropyl)ether	yes	59	ND	0.05-0.1	n/a	µg/L	14	ND	0.05-0.05	n/a	µg/L	98	ND	1100	ND	99	ND	1100	ND	1400	SSQP	yes
Bis(2-ethylhexyl)phthalate	yes	59	100.00%	0-0	0.05-15.83	µg/L	12	100.00%	0-0	0.26-2.61	µg/L	0	no data	no data	no data	0	no data	no data	no data	1.8	SSQP	yes
BOD (5)	yes	59	83.05%	2-30	3-730	mg/L	15	86.67%	2-15	3-122	mg/L	65	12.31%	2-3	2-5	44	11.36%	2-2	2-2	none		no criterion
Bolax	yes	72	ND	0-0.2	n/a	µg/L	171	ND	0-0.1	n/a	µg/L	123	ND	0.07-0.2	ND	139	ND	0.07-0.1	ND	none		no criterion
Bromacil	yes	60	3.33%	0.4-0.4	0.1-0.3	µg/L	14	7.14%	0.2-0.4	0.12-0.12	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none		no criterion
Butyl benzyl phthalate	yes	59	96.61%	0.03-0.03	0.01-2.39	µg/L	12	100.00%	0-0	0.05-1	µg/L	0	no data	no data	no data	0	no data	no data	no data	3000	SSQP	no criterion
Cadmium, Dissolved	yes	60	90.00%	0.02-0.04	0.01-1.6	µg/L	48	56.25%	0.01-0.1	0.01-0.17	µg/L	85	48.75%	0	0.0-0.4	83	33.73%	0	0.01-0.03	none		no criterion
Cadmium, Total	no	3	100.00%	0-0	0.03-0.1	µg/L	2	50.00%	0.2-0.2	0.46-0.46	µg/L	102	33.33%	0	0.01-0.1	97	71.13%	0	0.01-0.13	none		no criterion
Cadmium, Total Recoverable	no	57	100.00%	0-0	0.02-2.5	µg/L	49	73.47%	0.01-0.04	0.02-0.99	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Calcium, Dissolved	yes	0	no data	0-0	n/a	µg/L	24	100.00%	0-0	5200-22600	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Calcium, Total	no	9	100.00%	0-0	6290-48000	µg/L	50	100.00%	0-0	6000-25300	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Carbaryl	yes	60	5.00%	0.07-0.1	n/a	µg/L	14	ND	0.05-0.1	n/a	µg/L	84	ND	0.05-1	ND	84	ND	0.05-1	ND	none		no criterion
Carbofuran	yes	60	5.00%	0.07-0.1	0.1-1.12	µg/L	14	ND	0.05-0.1	n/a	µg/L	84	ND	0.05-1	ND	84	ND	0.05-1	ND	18	SSQP	yes
Carbon, Dissolved Organic	yes	62	100.00%	0-0	2-300	mg/L	42	95.24%	0.5-1	2.4-120	mg/L	150	99.33%	1.4-1.4	1.1-5.5	168	98.81%	1.2-5	1.1-11	none		no criterion
Carbon, Total Organic	yes	62	100.00%	0-0	3-310	mg/L	42	100.00%	0-0	2-130	mg/L	146	97.26%	0.92-2.5	0.93-6.2	163	95.71%	1.3-2.5	0.52-5.9	none		no criterion
Chemical Oxygen Demand	no	15	93.33%	50-50	19-100	mg/L	7	71.43%	50-50	22-100	mg/L	22	95.45%	5-5	5-5	15	80.00%	5-5	6-20	none		no criterion
Chlordane	yes	3	100.00%	0-0	n/a	µg/L	2	50.00%	0-0	0.01-0.01	µg/L	59	8.47%	0.01-0.5	0.5-0.5	40	10.00%	0.01-0.5	0.5-0.5	0.57	SSQP	yes
Chlordane, alpha	no	60	8.33%	0-0.05	n/a.04	µg/L	35	2.86%	0-0.01	n/a	µg/L	37	ND	1	ND	25	ND	1	ND	0.57	SSQP	yes
Chlordane, gamma	no	60	8.33%	0-0.05	n/a.03	µg/L	35	5.71%	0-0.01	n/a.02	µg/L	37	ND	1	ND	25	ND	1	ND	0.57	SSQP	yes
Chloride, Total	yes	42	78.19%	2-3	2.1-32	mg/L	30	96.67%	2-2	2.2-27	mg/L	0	no data	no data	no data	0	no data	no data	no data	250		no criterion
Chloroxuron	yes	60	ND	0.4-2	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none		no criterion
Chlorpropham	yes	60	ND	0.8-3.5	n/a	µg/L	14	ND	0.4-3.5	n/a	µg/L	84	ND	0.4-5	ND	84	ND	0.4-5	ND	none		no criterion
Chlorpyrifos	yes	74	9.46%	0.01-50	0.03-110	ng/L	173	4.62%	0-50	0.03-32	ng/L	123	ND	0	ND	140	1.43%	0	0.1-0.15	0.02/0.014	SSQP	mixed DLs
Chromium, Dissolved	yes	59	91.53%	0.07-0.1	0.17-5.68	µg/L	36	97.22%	0.07-0.07	0.26-3.31	µg/L	78	44.87%	0.02-0.19	0.02-0.3	75	54.67%	0.02-0.4	0.02-1.52	none		no criterion
Chromium, Total	no	12	100.00%	0-0	0.38-20.3	µg/L	2	100.00%	0-0	5.66-14.8	µg/L	102	75.49%	0.02-0.36	0.02-6.4	97	92.78%	0.04-0.67	0.02-19.2	none		no criterion
Chromium, Total Hexavalent	no	6	ND	0.5-10	n/a	µg/L	6	ND	0.5-10	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Chromium, Total Recoverable	no	48	100.00%	0-0	0.24-7.98	µg/L	37	100.00%	0-0	0.96-16	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Chrysene	yes	59	86.10%	1-5	3.1-602	ng/L	14	78.57%	1-1	4.3-113	ng/L	98	18.37%	0.13-5	0.29-39.9	100	15.00%	0.3-10	0.25-6	0.0044	SSQP	yes
cis-Nonachlor	no	15	6.67%	0-0	1.5	ng/L	10	ND	0-1	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Copper, Dissolved	yes	60	100.00%	0-0	0.1-14.1	µg/L	62	100.00%	0-0	0.99-18.7	µg/L	83	97.59%	0.49-0.94	0.32-2.18	82	97.56%	0.55-3.36	10	0.5-148	yes	no criterion
Copper, Total	no	3	100.00%	0-0	3.99-6.99	µg/L	10	100.00%	0-0	2.02-51	µg/L	102	94.12%	0.04-0.57	0.11-7.2	97	93.81%	0.01-0.1	0.01-20.2	1000		no criterion
Copper, Total Recoverable	no	57	100.00%	0-0	1.58-118	µg/L	56	100.00%	0-0	1.47-58.4	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no
Coumaphos	yes	42	ND	0.2-0.2	n/a	µg/L	122	ND	0.13-0.2	n/a	µg/L	123	ND	0.13-0.5	ND	139	ND	0.13-0.5	ND	none		no criterion
Cyanazine	yes	30	ND	0.01-0.5	n/a	µg/L	9	ND	0.01-0.5	n/a	µg/L	62	ND	0.09-0.5	ND	42	ND	0.09-0.5	ND	none		no criterion
Cyanide	yes	6	ND	3-3	n/a	µg/L	6	16.67%	3-3	7-7	µg/L	9	ND	0.8-5	ND	59	8.47%	0.8-5	0.93-5	none		no criterion
Dalapon	no	45	ND	1-5	n/a	µg/L	15	ND	0.59-2	n/a	µg/L	52	ND	0.59-2	ND	33	ND	0.59-1	ND	5.2	SSQP	yes
DOPA (Dacthal)	yes	15	ND	5-10	n/a	µg/L	10	ND	5-5	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Def	yes	42	ND	0.1-0.1	n/a	µg/L	121	ND	0.08-0.1	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Def/Merphos	no	0	no data	0-0	n/a	µg/L	1	100.00%	0-0	0.07-0.07	µg/L	21	ND	0.1-0.1	ND	31	ND	0.1-0.1	ND	none		no criterion
Demeton	yes	74	ND	0-0.5	n/a	µg/L	173	ND	0-0.5	n/a	µg/L	119	ND	0.08-0.4	ND	137	ND	0.08-0.2	ND	none		no criterion
Diazinon	yes	74	47.30%	0-0.05	0.01-0.56	µg/L	173	18.50%	0-0.05	0.01-6.5	µg/L	123	ND	0	ND	140	2.86%	0	0.01-0.06	0.08/0.05	SSQP	yes
Dibenz(a,h)anthracene	yes	59	20.34%	0-0.01	0.01-0.15	µg/L	14	14.29%	0-0	0.02-0.02	µg/L	98	ND	0.27-5	ND	100	ND	0.22-10	ND	0.0044	SSQP	yes
Dibenzofluorene	no	30	56.67%	1-5	7.4-91.8	ng/L	8	100.00%	0-0	3.6-218	ng/L	23	ND	1-5	ND	20	ND	1-5	ND	none		no criterion
Dicamba	yes	45	15.56%	0.1-0.5	0.03-0.25	µg/L	15	46.67%	0.03-0.1	0.03-0.09	µg/L	52	ND	0.03-0.2	ND	33	ND	0.03-0.1	ND	none		no criterion
Dichloroprop	yes	45	4.44%	0.5-2.5	0.19-0.48	µg/L	15	ND	0.16-1	n/a	µg/L	52	ND	0.16-1	ND	33	ND	0.16-5	ND	none		no criterion
Dichlorvos	yes	72	1.39%	0.02	0.06-0.06	µg/L	171	ND	0-0.2	n/a	µg/L	123	ND	0.02-0.4	ND	139	ND	0.02-0.2	ND	none		no criterion
Dicofol	no	14	ND	50-100	n/a	ng/L	10	ND	50-50	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Dieldrin	yes	60	6.67%	0-0.05	0.01-0.05	µg/L	35	2.86%	0-0.01	0.01-0.01	µg/L	65	ND	1	ND	46	ND	1	ND	0.14	SSQP	yes
Diethyl phthalate	yes	59	96.61%	0.1-0.1	0.02-1.97	µg/L	12	100.00%	0-0	0.05-0.49	µg/L	98	5.10%	5-483	9.1-71.5	99	11.11%	5-312	7.5-533	23000	SSQP	yes
Dimethoate	yes	72	2.78%	0-0.1	0.05-0.1	µg/L	171	ND	0-0.1	n/a	µg/L	123	ND	0.08-0.2	ND	139	ND	0.08-0.1	ND	none		no criterion
Dimethyl phthalate	yes	59	91.53%	0.01-0.05	0.01-7.62	µg/L	12	91.67%	0.01-0.01	0.01-0.36	µg/L	98	2.04%	5-357	5.2-8	99	7.07%	5-314	5-75.2	31300	SSQP	yes
Di-n-butyl phthalate	yes	59	94.92%	0.08-0.08	0.02-1.98	µg/L	12	100.00%	0-0	0.04-0.37	µg/L	98	9.18%	5-201.5	10.6-162.8	99	13.13%	5-352.7	10.7-1290	2700	SSQP	yes
Di-n-octyl phthalate	yes	59	77.97%	0.01-0.01	0.01-8.2	µg/L	12	100.00%	0-0	0.01-0.56	µg/L	98	17.35%	5-20	7.8-335	99	3.03%	5-20	2.9-34.4	none		no criterion
Dinoseb	yes	45	ND	0.25-1.25	n/a	µg/L	15	ND	0.08-0.5	n/a	µg/L	52	3.85%	0.08-0.5	0.09-0.29	33	6.96%	0.25-0.25	0.08-0.23	none		no criterion
Diphenamid	yes	38	ND	0-1.01	n/a	µg/L	105	ND	0-1.02	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Dissolved Oxygen	no	0	no data	0-0	n/a	mg/L	18	94.44%	1-1	2.91-9	mg/L	109	100.00%</									

Attachment A: Summary Statistics and Minimum Relevant Regulatory Criteria

Isophorone	yes	59	13.56%	0.05-0.1	0.02-0.34	µg/L	14	ND	0.05-0.05	n/a	µg/L	98	ND	1100	ND	99	ND	1100	ND	8.4	SSQP	mixed DLs
Lead, Dissolved	yes	60	96.67%	0.02-0.04	0.03-1.97	µg/L	56	94.64%	0-0.04	0.02-3.58	µg/L	85	38.82%	0.01-0.1	0.01-0.4	83	50.60%	0.01-0.1	0.02-0.45	none		no criterion
Lead, Total	no	3	100.00%	0	0.45-0.61	µg/L	10	100.00%	0-0	0.17-54.8	µg/L	102	100.00%	0.02-0.31	0.01-5.39	30	83.33%	0	0.02-2.41	15		no criterion
Lead, Total Recoverable	no	57	100.00%	0-0	0.28-90.4	µg/L	49	100.00%	0-0	0.17-54.8	µg/L	0	no data	no data	no data	0	no data	no data	no data	15		no criterion
Linuron	yes	60	ND	0-0.4	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	64	ND	0.2-1	ND	84	ND	0.2-1	ND	none		no criterion
Magnesium, Dissolved	yes	0	no data	0	n/a	µg/L	24	100.00%	0-0	1120-13400	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Magnesium, Total	no	9	100.00%	0-0	1280-20800	µg/L	50	100.00%	0-0	1690-14800	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Malathion	yes	74	20.27%	0-0.5	0.03-0.13	µg/L	173	15.61%	0.03-0.1	0.03-0.13	µg/L	123	13	0.05-0.2	ND	139	ND	0.05-0.1	ND	none		no criterion
MBAS	no	45	71.11%	0.03-1	0.02-1.5	mg/L	14	57.14%	0.01-0.03	0.01-0.82	mg/L	61	26.23%	0.01-0.1	0.01-0.07	40	17.50%	0.01-0.1	0.01-0.05	0.5	SSQP	yes
MCPA	yes	45	ND	100-500	n/a	µg/L	15	ND	25.4-200	n/a	µg/L	52	ND	25.4-200	ND	33	ND	25.4-100	ND	none		no criterion
MCPP	no	45	ND	100-500	n/a	µg/L	15	ND	35.8-200	n/a	µg/L	52	ND	35.8-200	ND	33	ND	35.8-100	ND	none		no criterion
Mercury, Dissolved	no	61	100.00%	0-0	0.61-10.2	ng/L	13	100.00%	0-0	1.89-8.14	ng/L	120	67.50%	0.15-2.18	0.22-1.65	141	75.18%	0.47-2.21	0.32-2.7	none		no criterion
Mercury, Total	yes	62	100.00%	0-0	1.65-609	ng/L	11	100.00%	0-0	12.2-101	ng/L	141	85.1%	0.15-2.37	0.5-1.39	161	88.82%	0.15-2.13	0.19-31	50	SSQP	yes
Mercury, Total Methyl	no	60	100.00%	0-0	0.05-2.04	ng/L	14	100.00%	0-0	0.2-1.4	ng/L	129	81.24%	0.01-0.06	0.03-0.71	147	78.23%	0.03-0.12	0.04-0.39	none		no criterion
Mercury, Total Recoverable	no	72	ND	0-0.1	n/a	ng/L	3	100.00%	0-0	42.8-110	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Merphos	yes	3	ND	0.1-0.1	n/a	µg/L	170	0.59%	0-0.1	0.02-0.02	µg/L	102	ND	0.06-0.2	ND	108	ND	0.06-0.2	ND	none		no criterion
Methidathion	yes	41	2.44%	0.02-0.1	0.05-0.05	µg/L	105	ND	0.1-0.2	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Methiocarb	yes	60	ND	0.4-0.4	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none		no criterion
Methomyl	yes	60	ND	0.07-0.1	n/a	µg/L	14	ND	0.05-0.1	n/a	µg/L	84	ND	0.05-1	ND	84	ND	0.05-1	ND	none		no criterion
Methoxychlor	no	60	ND	0-0.05	n/a	µg/L	175	ND	0-0.01	n/a	µg/L	65	ND	1	ND	46	ND	1	ND	40	SSQP	yes
Methyl parathion	no	74	ND	0-1	n/a	µg/L	33	0.58%	0-1	0.02-0.02	µg/L	123	ND	0.08-0.2	ND	139	ND	0.08-0.1	ND	none		no criterion
Methyl tert-butyl ether	yes	12	ND	1-5	n/a	µg/L	6	ND	1-10	n/a	µg/L	7	ND	0.19-0.5	ND	19	5.26%	0.19-0.5	0.51-0.51	none		no criterion
Methyl trithion	yes	38	ND	0.2-0.2	n/a	µg/L	105	ND	0.2-0.4	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Mevinphos	yes	72	ND	0.01-0.7	n/a	µg/L	171	ND	0.01-0.7	n/a	µg/L	122	ND	0.07-1.4	ND	139	ND	0.07-0.7	ND	none		no criterion
Mexacarbamate	yes	60	ND	0.8-0.8	n/a	µg/L	14	ND	0.4-0.8	n/a	µg/L	84	ND	0.4-5	ND	84	ND	0.4-5	ND	none		no criterion
Mirex	no	15	ND	0-0.01	n/a	µg/L	2	ND	0-0	n/a	µg/L	2	ND	1-1	ND	1	ND	1-1	ND	none		no criterion
Monuron	yes	60	ND	0.4-0.4	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none		no criterion
Naled	yes	42	ND	0.5-0.5	n/a	µg/L	122	ND	0.27-0.5	n/a	µg/L	123	ND	0.27-1	ND	139	ND	0.27-0.7	ND	none		no criterion
Naphthalene	yes	59	77.97%	0-0.01	n/a, 11	µg/L	14	92.86%	0-0	n/a, 11	µg/L	98	35.71%	1-20	1.2-26.9	99	28.28%	1-20.4	1-29.6	none		no criterion
Nebutron	yes	60	ND	0.4-0.4	n/a	µg/L	14	ND	0.2-0.8	n/a	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none		no criterion
Nickel, Dissolved	yes	60	98.33%	0.1-0.1	0.36-6.35	µg/L	56	100.00%	0-0	0.58-16.4	µg/L	86	89.53%	0.3-1.5	0.09-0.96	84	96.43%	1.22-1.85	0.18-2.47	none		no criterion
Nickel, Total	no	3	100.00%	0-0	1.33-1.91	µg/L	10	100.00%	0-0	1.26-19.6	µg/L	102	86.27%	0.04-0.6	0.09-7.31	97	91.75%	0.01-1.05	0.01-30.6	none		no criterion
Nickel, Total Recoverable	no	57	100.00%	0-0	0.62-28.2	µg/L	49	100.00%	0-0	1.02-22.1	µg/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
Nitrate as N	yes	8	87.50%	0.1-0.1	0.12-1.7	mg/L	1	100.00%	0-0	0.76-7.6	mg/L	127	35.43%	0.1-0.5	0-1.1	144	64.58%	0.1-0.47	0.03-2.6	45	SSQP	yes
Nitrate plus Nitrite as N	no	60	88.33%	0.1-1.7	0.02-5.2	mg/L	13	100.00%	0-0	0.36-3.3	mg/L	0	no data	no data	no data	0	no data	no data	no data	10	SSQP	yes
Nitrite as N	yes	8	ND	0.1-0.25	n/a	mg/L	1	ND	0.1-0.1	n/a	mg/L	127	17.32%	0	0-0.42	144	13.89%	0	0-0.22	11	SSQP	yes
Nitrobenzene	yes	59	1.69%	0.05-0.1	0.04-0.04	µg/L	14	ND	0.05-0.05	n/a	µg/L	98	ND	1100	ND	99	ND	1100	ND	none		no criterion
N-Nitrosodimethylamine	no	56	ND	0.05-0.1	n/a	µg/L	14	14.29%	0.05-0.1	0.2-0.23	µg/L	80	ND	1100	ND	69	ND	0.2-1	ND	none		no criterion
N-Nitrosodi-N-propylamine	yes	59	1.69%	0.05-0.1	0.23-0.23	µg/L	14	ND	0.05-0.05	n/a	µg/L	18	ND	5100	ND	30	3.33%	3.1-100	48.2-48.2	none		no criterion
N-Nitrosodiphenylamine	yes	59	ND	0.05-0.1	n/a	µg/L	14	ND	0.05-0.05	n/a	µg/L	80	ND	1100	ND	69	ND	1100	ND	none		no criterion
Oryzalin	yes	60	45.00%	0.4-0.4	0.1-3.6	µg/L	14	50.00%	0.2-0.4	0.3-1.2	µg/L	82	3.66%	0.2-1	0.2-0.31	81	4.94%	0.2-1	0.1-0.23	200	SSQP	yes
Oxamyl	yes	60	ND	0.4-5	n/a	µg/L	14	ND	0.2-0.8	n/a	µg/L	84	ND	0.2-5	ND	84	ND	0.2-5	ND	none		no criterion
Oxychlorodane	no	14	ND	1-5	n/a	ng/L	10	ND	1-1	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
PCB 003	yes	0	no data	0-0	n/a	ng/L	4	ND	1-1	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
PCB 008	yes	0	no data	0-0	n/a	ng/L	8	ND	1-1	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
PCB 016	yes	9	ND	1-5	n/a	ng/L	14	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 028	yes	9	ND	1-5	n/a	ng/L	14	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 031	yes	9	ND	1-5	n/a	ng/L	14	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 033	yes	9	ND	1-5	n/a	ng/L	14	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 037	yes	9	ND	1-5	n/a	ng/L	14	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 044	yes	9	ND	1-5	n/a	ng/L	14	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 049	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 052	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 056/060	yes	0	no data	0-0	n/a	ng/L	4	ND	1-1	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none		no criterion
PCB 066	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 070	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 074	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 077	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 081	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 087	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 089	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 097	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 099	yes	9	ND	1-5	n/a	ng/L	12	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 101	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 1016	yes	53	ND	0.02-0.5	n/a	µg/L	36	ND	0.01-1	n/a	µg/L	59	8.47%	0.03-0.5	0.5-0.5	40	10.00%	0.03-0.5	0.5-0.5	0.17	SSQP	mixed DLs
PCB 105	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 110	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 114	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none		no criterion
PCB 118	yes	9	ND	1-5	n/a	ng/L																

Attachment A: Summary Statistics and Minimum Relevant Regulatory Criteria

PCB 183	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none	no criterion	
PCB 187	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none	no criterion	
PCB 189	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none	no criterion	
PCB 194	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none	no criterion	
PCB 195	yes	0	no data	0-0	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	no data	0	no data	1-1	no data	none	no criterion	
PCB 200	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none	no criterion	
PCB 201	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none	no criterion	
PCB 206	yes	9	ND	1-5	n/a	ng/L	13	ND	1-1	n/a	ng/L	2	ND	1-1	ND	2	ND	1-1	ND	none	no criterion	
PCB 209	yes	0	no data	0-0	n/a	ng/L	8	ND	1-1	n/a	ng/L	0	no data	0-0	no data	0	no data	0-0	no data	none	no criterion	
Pentachlorophenol	yes	59	50.85%	0.05-0.1	0.05-0.58	µg/L	14	78.57%	0.05-0.05	0.08-0.75	µg/L	95	3.16%	0.36-100	0.95-4.6	98	3.06%	0.4-100	1.9-4.3	0.28	SSQP	mixed DLs
Perthane	no	15	ND	5-10	n/a	ng/L	10	ND	5-5	n/a	ng/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Perylene	no	59	37.29%	0-0.01	n/a.21	µg/L	14	35.71%	0-0	n/a.05	µg/L	92	4.35%	1-5	2.7-3	90	2.22%	1-5	7-9.5	none	no criterion	
pH	no	9	100.00%	0-0	6.3-8.8	std. units	36	100.00%	0-0	6.04-9.96	std. units	111	100.00%	no data	6.2-8.7	131	100.00%	no data	6.5-8.1	6.5-8.5	SSQP	yes
pH (field)	no	19	100.00%	0-0	6.4-8.6	std. units	149	100.00%	0-0	3.65-10.44	std. units	0	no data	no data	no data	0	no data	no data	no data	no data	no data	no criterion
Phenanthrene	yes	59	74.58%	0-0.01	0.1-75	µg/L	14	92.86%	0-0	n/a.13	µg/L	98	24.49%	1-20	1-15.2	99	23.23%	1-20	1-15.1	none	no criterion	
Phenol	yes	59	16.95%	0.1-0.2	0.04-0.37	µg/L	14	14.29%	0.1-0.1	0.28-0.75	µg/L	95	ND	1200	ND	97	ND	1200	ND	21000	SSQP	yes
Phenolics, Total	no	3	ND	5-5	n/a	µg/L	0	50.00%	5-5	6.6-12	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Phorate	yes	72	ND	0.01-0.1	n/a	µg/L	171	ND	0.01-0.1	n/a	µg/L	123	ND	0.07-0.2	ND	139	ND	0.07-0.1	ND	none	no criterion	
Phosalone	yes	38	ND	0.1-0.2	n/a	µg/L	105	ND	0.1-0.2	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Phosmet	yes	41	ND	1-1	n/a	µg/L	105	0.95%	1-2	0.05-0.05	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Phosphate, Ortho as P	no	8	100.00%	0-0	0.13-0.51	mg/L	3	100.00%	0-0	0.07-0.14	mg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Phosphorus, Total	yes	19	100.00%	0-0	0.18-1.1	mg/L	0	no data	0-0	n/a	mg/L	119	25.21%	0.05-0.1	0.04-0.22	134	63.43%	0.05-0.11	0.03-2.5	none	no criterion	
Potassium, Dissolved	yes	0	no data	0-0	n/a	µg/L	3	100.00%	0-0	763-3850	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Potassium, Total	no	0	no data	0-0	n/a	µg/L	15	100.00%	0-0	800-8230	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Prometryn	no	0	no data	0-0	n/a	µg/L	2	ND	5-5	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Prometon	yes	121	7.44%	0.01-0.5	0.01-0.19	µg/L	152	7.24%	0.01-0.5	0.05-0.82	µg/L	62	ND	0.05-0.5	ND	42	ND	0.05-0.5	ND	none	no criterion	
Prometryn	no	45	ND	0.01-0.5	n/a	µg/L	13	ND	0.01-0.5	n/a	µg/L	62	ND	0.05-0.5	ND	42	ND	0.05-0.5	ND	none	no criterion	
Propachlor	yes	60	ND	0.4-3.5	n/a	µg/L	14	ND	0.2-3.5	n/a	µg/L	84	ND	0.2-5	ND	84	ND	0.2-5	ND	none	no criterion	
Propazine	no	45	6.67%	0.01-0.5	0.27-0.62	µg/L	15	ND	0.01-0.5	n/a	µg/L	62	ND	0.05-0.5	ND	42	ND	0.05-0.5	ND	none	no criterion	
Prothiam	yes	60	ND	0.8-3.5	n/a	µg/L	14	ND	0.4-3.5	n/a	µg/L	84	ND	0.4-5	ND	84	ND	0.4-5	ND	none	no criterion	
Propoxur	yes	60	ND	0.4-0.4	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none	no criterion	
Prowl	yes	42	54.76%	0.1-0.1	0.01-1	µg/L	122	23.77%	0.04-0.1	0.03-0.98	µg/L	21	ND	0.1-0.1	ND	31	ND	0.1-0.1	ND	none	no criterion	
Pyrene	yes	59	83.05%	0-0.01	0.1-76	µg/L	14	92.86%	0-0	n/a.16	µg/L	98	32.65%	1-5	0.26-248	100	34.00%	1-10	0.66-7.7	960	SSQP	yes
Ronnel	yes	72	ND	0-0.1	n/a	µg/L	171	ND	0-0.1	n/a	µg/L	123	ND	0.03-0.2	ND	139	ND	0.03-0.1	ND	none	no criterion	
Secbumeton	no	15	ND	5-10	n/a	µg/L	3	ND	5-5	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Selenium, Dissolved	yes	6	100.00%	0-0	0.08-0.24	µg/L	6	100.00%	0-0	0.09-0.42	µg/L	14	28.57%	0.07-0.3	0.1-0.22	27	40.74%	0.11-0.6	0.1-0.6	none	no criterion	
Selenium, Total	no	3	100.00%	0-0	0.3-0.37	µg/L	3	100.00%	0-0	0.09-0.44	µg/L	18	50.00%	0.07-0.3	0.07-0.29	34	35.29%	0.07-0.6	0.14-0.6	none	no criterion	
Selenium, Total Recoverable	no	3	100.00%	0-0	0.11-0.16	µg/L	3	100.00%	0-0	0.07-0.12	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Siduron	yes	60	ND	0.4-0.4	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none	no criterion	
Silver, Dissolved	yes	6	ND	0.03-0.04	n/a	µg/L	18	16.67%	0-0.1	0.02-0.07	µg/L	78	12.82%	0	0-0.04	74	10.81%	0	0-0.05	none	no criterion	
Silver, Total Recoverable	no	6	50.00%	0.03-0.1	0.04-0.34	µg/L	18	61.11%	0-0.04	0.03-1.1	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Simazine	yes	83	20.48%	0.01-0.5	0.04-3.7	µg/L	120	25.83%	0.01-0.5	0.08-8.5	µg/L	62	3.23%	0.08-0.5	0.11-0.17	42	4.76%	0.08-0.5	0.1-0.13	none	no criterion	
Simetryn	no	45	ND	0.01-0.5	n/a	µg/L	15	ND	0.01-0.5	n/a	µg/L	62	ND	0.05-0.5	ND	42	ND	0.05-0.5	ND	4	SSQP	yes
Sodium, Dissolved	no	0	no data	0-0	n/a	µg/L	3	100.00%	0-0	8290-17300	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Sodium, Total	no	0	no data	0-0	n/a	µg/L	15	100.00%	0-0	2740-17500	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Solids, Total Dissolved	yes	59	98.51%	20-20	26-960	mg/L	14	100.00%	0-0	73-480	mg/L	128	92.57%	278	24-150	158	95.33%	33-190	125	SSQP	yes	
Solids, Total Suspended	yes	59	91.83%	3-40	3-440	mg/L	17	94.12%	3-3	3-330	mg/L	127	82.76%	2-9	3-50.5	148	93.92%	6-13	3-150	none	no criterion	
Specific Conductance	no	27	100.00%	0-0	26-1700	µmhos/cm	14	100.00%	0-0	69-513	µmhos/cm	112	100.00%	no data	41-180	130	100.00%	no data	58-260	240	SSQP	mixed DLs
Specific Conductance (field)	no	19	100.00%	0-0	41-461	µmhos/cm	0	100.00%	0-0	7-554	µmhos/cm	0	no data	no data	no data	0	no data	no data	no data	no data	no data	no criterion
Stirophos	yes	72	ND	0-0.1	n/a	µg/L	171	ND	0-0.1	n/a	µg/L	123	ND	0.06-0.2	ND	139	ND	0.06-0.2	ND	none	no criterion	
Sulfate as SO4	yes	0	no data	0-0	n/a	mg/L	0	100.00%	0-0	6.6-49	mg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Sulfide	no	0	no data	0-0	n/a	mg/L	12	ND	0.1-0.1	n/a	mg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Sulfotep	yes	42	ND	0.1-0.1	n/a	µg/L	122	ND	0.02-0.1	n/a	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Tebuthiuron	yes	57	ND	0.4-0.4	n/a	µg/L	14	ND	0.2-0.4	n/a	µg/L	84	ND	0.2-1	ND	84	ND	0.2-1	ND	none	no criterion	
Temperature (field)	no	21	100.00%	0-0	9.3-25	deg C	168	100.00%	0-0	7.6-30.4	deg C	0	no data	no data	no data	0	no data	no data	no data	20	SSQP	yes
Terbutylazine	no	45	ND	0.01-0.5	n/a	µg/L	15	ND	0.01-0.5	n/a	µg/L	62	ND	0.05-0.5	ND	42	ND	0.05-0.5	ND	none	no criterion	
Terbutryn	no	45	ND	0.01-0.5	n/a	µg/L	15	ND	0.01-0.5	n/a	µg/L	62	ND	0.07-0.5	ND	42	ND	0.07-0.5	ND	none	no criterion	
Thallium, Dissolved	no	6	ND	0-0.01	n/a	µg/L	6	ND	0-0.01	n/a	µg/L	4	ND	no data	ND	15	26.67%	0	0-0.01	none	no criterion	
Thallium, Total Recoverable	no	6	83.33%	0.02-0.02	0.02-0.06	µg/L	6	66.67%	0.01-0.02	0.02-0.07	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Tokuthion	yes	72	ND	0-0.1	n/a	µg/L	171	0.58%	0-0.1	0.03-0.03	µg/L	123	ND	0.02-0.2	ND	139	ND	0.02-0.1	ND	none	no criterion	
Toluene	no	9	22.22%	0.5-0.5	0.8-1.4	µg/L	6	no data	0-0	n/a	µg/L	49	12.24%	0.17-1.3	0.22-2.2	66	10.61%	0.17-1.1	0.19-0.34	none	no criterion	
Total Coliform	no	61	100.00%	0-0	1700-5000000	MPN/100mL	61	100.00%	0-0	30-100000	MPN/100mL	127	99.21%	1600160000	30-160000	126	100.00%	no data	80-30000	none	no criterion	
Total Detectable DDTs	no	3	100.00%	0-0	n/a	ng/L	2	ND	1-1	n/a	ng/L	2	100.00%	no data	no data	2	100.00%	no data	ND	none	no criterion	
Total Detectable PAHs	no	0	no data	0-0	n/a	µg/L	16	100.00%	0-0	0.03-1.05	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Total Detectable PCBs	no	3	100.00%	0-0	n/a	ng/L	6	ND	1-1	n/a	ng/L	2	100.00%	no data	no data	2	100.00%	no data	ND	none	no criterion	
Total Kjeldahl Nitrogen as N	no	60	100.00%	0-0	0.25-8.2	µg/L	14	100.00%	0-0	0.54-9.1	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
Toxaphene	yes	60	ND	0.01-1	n/a	µg/L	35	ND	0.01-0.5	n/a	µg/L	65	7.69%	0.1-1	0.01-0.5	46	8.70%	0.1-1	0.5-0.5	0.2	SSQP	mixed DLs
TPH as Diesel	no	45	75.56%	50-50	60-5100	µg/L	14	78.57%	20-50	51-2300	µg/L	0	no data	no data	no data	0	no data	no data	no data	none	no criterion	
TPH as Gasoline	no	39	2.56%	50-50	80-80	µg/L	0	9.09%	17-1000	170-170	µg/L											

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benz(a)anthracene	10/1/02	0.11
Location	American River	10/2/02	-0.77
Data Source	CMP	2/5/03	-0.165
		2/6/03	0.194
min date	10/1/2002	2/16/03	-1
max date	6/11/2008	2/16/03	-1
		6/10/03	-0.1
		6/11/03	-0.127
Percent Exceedance stats		10/14/03	-1
WQO	4.4	10/15/03	-1
n	98	12/13/03	-2
n detected > WQO	2	12/14/03	-2
% detected > WQO	2.04	12/14/03	-2
		12/14/03	-2
		2/17/04	-2
Other Stats		2/18/04	-2
% detected	11.22	2/19/04	-2
n BDL	87	4/13/04	-2
n DLs	7	4/13/04	-2
max detected	22.5	4/14/04	-2
min detected	0.11	6/8/04	-5
max BDL	<5	6/8/04	-5
min BDL	<0.1	6/8/04	-5
n BDL > max detected	0	6/9/04	-5
n BDL > WQO	57	10/5/04	-5
n detected	11	10/5/04	-5
n BDL < WQO	30	10/6/04	-5
max/WQO	5.1136	10/19/04	22.5
detected < WQO	96	10/19/04	-5
n < max DL	96	10/20/04	-5
		10/20/04	-5
		1/28/05	-5
		1/28/05	-5
		1/28/05	-5
		1/28/05	-5
		1/28/05	-5
		2/15/05	-5
		2/16/05	-5
		4/12/05	-5
		4/12/05	-5
		4/13/05	-5
		6/7/05	-5
		6/8/05	-5
		10/4/05	-5
		10/5/05	-5
		12/1/05	5
		12/1/05	-5
		12/2/05	-5
		2/7/06	-5
		2/7/06	-5
		2/7/06	-5
		2/7/06	-5
		2/8/06	-5
		2/27/06	2.2
		2/27/06	-5

Percent Exceedance Template

2/28/06	-5
2/28/06	-5
2/28/06	-5
2/28/06	-5
6/13/06	-5
6/13/06	-5
6/14/06	-5
10/10/06	-5
10/11/06	-5
11/3/06	3.5
11/3/06	1.5
12/9/06	2
12/9/06	3.2
12/10/06	2.4
2/7/07	-5
2/8/07	-5
4/3/07	-5
4/3/07	-5
4/3/07	-5
4/4/07	-5
4/4/07	-5
6/5/07	-5
6/6/07	-5
6/6/07	-5
10/9/07	-5
10/9/07	-5
10/9/07	-5
10/10/07	-5
10/10/07	-5
10/10/07	-5
1/4/08	-1
1/4/08	1.8
1/4/08	-1
1/4/08	-1
1/4/08	-1
2/5/08	-1
2/5/08	-1
2/5/08	-1
2/6/08	-1
2/6/08	-1
6/11/08	-1
6/11/08	-1
6/11/08	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(b)fluoranthene	10/1/2002	-10
Location	American River	10/2/2002	-10
Data Source	CMP	2/5/2003	-20
min date	10/1/2002	2/6/2003	-20
max date	6/11/2008	2/16/2003	-1
Percent Exceedance stats		2/16/2003	-1
WQO	4.4	6/10/2003	-10
n	98	6/11/2003	-10
n detected > WQO	2	10/14/2003	-1
% detected > WQO	2.04	10/15/2003	-1
Other Stats		12/13/2003	-2
% detected	8.16	12/14/2003	-2
n BDL	90	12/14/2003	-2
n DLs	5	12/14/2003	-2
max detected	37.8	12/14/2003	2.6
min detected	2.3	2/17/2004	-2
max BDL	<20	2/18/2004	-2
min BDL	<1	2/19/2004	-2
n BDL > max detected	0	4/13/2004	-2
n BDL > WQO	67	4/13/2004	-2
n detected	8	4/14/2004	-2
n BDL < WQO	23	6/8/2004	-5
max/WQO	8.5909	6/8/2004	-5
detected < WQO	96	6/8/2004	-5
n < max DL	97	6/8/2004	-5
		6/9/2004	-5
		10/5/2004	-5
		10/5/2004	-5
		10/6/2004	-5
		10/19/2004	37.8
		10/19/2004	-5
		10/20/2004	-5
		10/20/2004	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	-5
		2/15/2005	-5
		2/16/2005	-5
		4/12/2005	-5
		4/12/2005	-5
		4/13/2005	-5
		6/7/2005	-5
		6/8/2005	-5
		10/4/2005	-5
		10/5/2005	-5
		12/1/2005	9.2
		12/1/2005	-5
		12/2/2005	-5
		2/7/2006	-5
		2/7/2006	-5
		2/7/2006	-5
		2/7/2006	-5
		2/8/2006	-5

Percent Exceedance Template

2/27/2006	-5
2/27/2006	-5
2/28/2006	-5
2/28/2006	-5
2/28/2006	-5
2/28/2006	-5
6/13/2006	-5
6/13/2006	-5
6/14/2006	-5
10/10/2006	-5
10/11/2006	-5
11/3/2006	-5
11/3/2006	-5
12/9/2006	3.8
12/9/2006	3.4
12/10/2006	-5
2/7/2007	-5
2/8/2007	-5
4/3/2007	-5
4/3/2007	-5
4/3/2007	-5
4/4/2007	-5
04/04/2007	-5
6/5/2007	-5
6/6/2007	-5
06/06/2007	-5
10/9/2007	-5
10/9/2007	-5
10/09/2007	-5
10/10/2007	-5
10/10/2007	-5
10/10/2007	-5
1/4/2008	-1
1/4/2008	2.3
1/4/2008	4.3
1/4/2008	-1
01/04/2008	4.3
2/5/2008	-1
2/5/2008	-1
2/5/2008	-1
2/6/2008	-1
02/06/2008	-1
6/11/2008	-1
6/11/2008	-1
6/11/2008	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(a)pyrene	10/1/2002	-0.74
Location	American River	10/2/2002	-1.9
Data Source	CMP	2/5/2003	-0.523
		2/6/2003	-0.492
		2/16/2003	-1
min date	10/1/2002	2/16/2003	-1
max date	6/11/2008	6/10/2003	-0.222
		6/11/2003	-0.34
Percent Exceedance stats		10/14/2003	-1
WQO	4.4	10/15/2003	-1
n	98	12/13/2003	-2
n detected > WQO	1	12/14/2003	-2
% detected > WQO	1.02	12/14/2003	-2
		12/14/2003	-2
Other Stats		2/17/2004	-2
% detected	5.10	2/18/2004	-2
n BDL	93	2/19/2004	-2
n DLs	9	4/13/2004	-2
max detected	5.2	4/13/2004	-2
min detected	1.4	4/14/2004	-2
max BDL	<5	6/8/2004	-5
min BDL	<0.222	6/8/2004	-5
n BDL > max detected	0	6/8/2004	-5
n BDL > WQO	62	6/9/2004	-5
n detected	5	10/5/2004	-5
n BDL < WQO	31	10/5/2004	-5
max/WQO	1.1818	10/6/2004	-5
detected < WQO	97	10/19/2004	-5
n < max DL	97	10/19/2004	-5
		10/20/2004	-5
		10/20/2004	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	1.4
		1/28/2005	-5
		2/15/2005	-5
		2/16/2005	-5
		4/12/2005	-5
		4/12/2005	-5
		4/13/2005	-5
		6/7/2005	-5
		6/8/2005	-5
		10/4/2005	-5
		10/5/2005	-5
		12/1/2005	5.2
		12/1/2005	-5
		12/2/2005	-5
		2/7/2006	-5
		2/7/2006	-5
		2/7/2006	-5
		2/7/2006	-5
		2/8/2006	-5
		2/27/2006	-5
		2/27/2006	-5

Percent Exceedance Template

2/28/2006	-5
2/28/2006	-5
2/28/2006	-5
2/28/2006	-5
6/13/2006	-5
6/13/2006	-5
6/14/2006	-5
10/10/2006	-5
10/11/2006	-5
11/3/2006	-5
11/3/2006	-5
12/9/2006	-5
12/9/2006	3.4
12/10/2006	-5
2/7/2007	-5
2/8/2007	-5
4/3/2007	-5
4/3/2007	-5
4/3/2007	-5
4/4/2007	-5
4/4/2007	-5
6/5/2007	-5
6/6/2007	-5
6/6/2007	-5
10/9/2007	-5
10/9/2007	-5
10/9/2007	-5
10/10/2007	-5
10/10/2007	-5
10/10/2007	-5
1/4/2008	-1
1/4/2008	-1
1/4/2008	4
1/4/2008	-1
1/4/2008	4
2/5/2008	-1
2/5/2008	-1
2/5/2008	-1
2/6/2008	-1
2/6/2008	-1
6/11/2008	-1
6/11/2008	-1
6/11/2008	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Solids, Total Dissolved	9/3/2002	52
Location	American River	9/3/2002	52
Data Source	CMP	9/4/2002	74
		9/4/2002	74
min date	9/3/2002	10/1/2002	40
max date	6/11/2008	10/1/2002	40
		10/2/2002	31
		10/2/2002	31
Percent Exceedance stats		11/5/2002	90
WQO	125	11/5/2002	90
n	256	11/6/2002	66
n detected > WQO	4	11/6/2002	66
% detected > WQO	1.56	12/3/2002	50
		12/3/2002	50
Other Stats		12/4/2002	51
% detected	92.97	12/4/2002	51
n BDL	18	1/7/2003	77
n DLs	8	1/7/2003	77
max detected	150	1/8/2003	56
min detected	24	1/8/2003	56
max BDL	<78	2/5/2003	47
min BDL	<20	2/5/2003	47
n BDL > max detected	0	2/6/2003	34
n BDL > WQO	0	2/6/2003	34
n detected	238	2/16/2003	44
n BDL < WQO	18	2/16/2003	48
max/WQO	1.2000	2/16/2003	44
detected < WQO	252	2/16/2003	48
n < max DL	222	3/4/2003	48
		3/4/2003	48
		3/5/2003	84
		3/5/2003	84
		3/15/2003	39
		3/15/2003	39
		3/15/2003	39
		3/15/2003	39
		4/1/2003	39
		4/1/2003	39
		4/2/2003	31
		4/2/2003	31
		5/6/2003	37
		5/6/2003	37
		5/7/2003	47
		5/7/2003	47
		6/10/2003	140
		6/10/2003	140
		6/11/2003	53
		6/11/2003	53
		8/5/2003	42
		8/5/2003	42
		8/6/2003	43
		8/6/2003	43
		10/14/2003	48
		10/14/2003	48
		10/15/2003	29
		10/15/2003	29
		12/9/2003	44
		12/9/2003	31
		12/9/2003	44
		12/9/2003	31
		12/10/2003	45

Percent Exceedance Template

12/10/2003	45
12/14/2003	48
12/14/2003	82
12/14/2003	48
12/14/2003	82
12/14/2003	89
12/14/2003	89
12/15/2003	89
12/15/2003	89
2/17/2004	32
2/17/2004	56
2/17/2004	32
2/17/2004	56
2/18/2004	65
2/18/2004	65
4/13/2004	69
4/13/2004	69
4/13/2004	24
4/13/2004	24
4/14/2004	40
4/14/2004	40
6/8/2004	68
6/8/2004	66
6/8/2004	68
6/8/2004	66
6/9/2004	56
6/9/2004	56
8/10/2004	79
8/10/2004	79
8/11/2004	66
8/11/2004	66
10/5/2004	-20
10/5/2004	-20
10/5/2004	32
10/5/2004	32
10/6/2004	50
10/6/2004	50
10/19/2004	79
10/19/2004	79
10/19/2004	80
10/19/2004	80
10/20/2004	56
10/20/2004	56
12/7/2004	67
12/7/2004	67
12/8/2004	69
12/8/2004	63
12/8/2004	69
12/8/2004	63
1/28/2005	83
1/28/2005	72
1/28/2005	83
1/28/2005	72
1/28/2005	68
1/28/2005	68
1/28/2005	50
1/28/2005	50
2/15/2005	76
2/15/2005	76
2/16/2005	71
2/16/2005	71
4/12/2005	44
4/12/2005	44
4/12/2005	110
4/12/2005	110
4/13/2005	89

Percent Exceedance Template

4/13/2005	89
6/7/2005	58
6/7/2005	58
6/8/2005	58
6/8/2005	58
8/2/2005	71
8/2/2005	71
8/3/2005	64
8/3/2005	71
8/3/2005	64
8/3/2005	71
10/4/2005	75
10/4/2005	75
10/5/2005	62
10/5/2005	62
12/1/2005	52
12/1/2005	52
12/1/2005	74
12/1/2005	74
12/2/2005	52
12/2/2005	52
2/7/2006	52
2/7/2006	52
2/7/2006	47
2/7/2006	31
2/7/2006	47
2/7/2006	31
2/8/2006	49
2/8/2006	49
2/27/2006	65
2/27/2006	65
2/27/2006	61
2/27/2006	61
2/28/2006	54
2/28/2006	49
2/28/2006	54
2/28/2006	49
4/4/2006	61
4/4/2006	61
4/5/2006	150
4/5/2006	150
6/13/2006	52
6/13/2006	52
6/13/2006	87
6/13/2006	87
6/14/2006	47
6/14/2006	47
8/1/2006	47
8/1/2006	47
8/3/2006	40
8/3/2006	47
8/3/2006	40
8/3/2006	47
10/10/2006	-55
10/10/2006	-55
10/11/2006	-29
10/11/2006	-29
11/3/2006	-62
11/3/2006	-62
11/3/2006	-78
11/3/2006	-78
12/9/2006	-51
12/9/2006	-51
12/9/2006	-31
12/9/2006	-31
12/10/2006	-45

Percent Exceedance Template

12/10/2006	-45
2/7/2007	44
2/7/2007	44
2/8/2007	-20
2/8/2007	-20
4/3/2007	74
4/3/2007	72
4/3/2007	74
4/3/2007	72
4/4/2007	62
4/4/2007	62
4/4/2007	65
4/4/2007	65
6/5/2007	54
6/5/2007	54
6/6/2007	90
6/6/2007	90
6/6/2007	67
6/6/2007	67
8/7/2007	60
8/7/2007	60
8/8/2007	48
8/8/2007	80
8/8/2007	48
8/8/2007	80
10/9/2007	49
10/9/2007	48
10/9/2007	49
10/9/2007	48
10/9/2007	62
10/9/2007	62
10/10/2007	56
10/10/2007	56
12/4/2007	38
12/4/2007	38
12/5/2007	26
12/5/2007	26
1/4/2008	70
1/4/2008	66
1/4/2008	70
1/4/2008	66
1/4/2008	58
1/4/2008	58
1/4/2008	90
1/4/2008	90
2/5/2008	68
2/5/2008	68
2/6/2008	76
2/6/2008	76
2/6/2008	77
2/6/2008	77
4/1/2008	65
4/1/2008	65
4/1/2008	57
4/1/2008	57
6/11/2008	61
6/11/2008	61
6/11/2008	63
6/11/2008	67
6/11/2008	70
6/11/2008	63
6/11/2008	67
6/11/2008	70

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Mercury, Total	9/3/2002	1
Location	American River	9/4/2002	0.8
Data Source	CMP	10/1/2002	1.3
		10/2/2002	0.7
		11/5/2002	0.6
min date	9/3/2002	11/6/2002	0.9
max date	6/11/2008	12/3/2002	0.7
		12/4/2002	1.3
Percent Exceedance stats		1/7/2003	1.5
WQO	50	1/8/2003	1.2
n	141	2/5/2003	0.8
n detected > WQO	1	2/6/2003	0.9
% detected > WQO	0.71	2/16/2003	1.5
		2/16/2003	0.8
Other Stats		3/4/2003	2.8
% detected	85.11	3/5/2003	2.4
n BDL	21	3/15/2003	2.2
n DLs	10	3/15/2003	0.8
max detected	139	4/1/2003	0.9
min detected	0.5	4/2/2003	0.6
max BDL	<2.37	5/6/2003	0.8
min BDL	<0.15	5/7/2003	1.1
n BDL > max detected	0	6/10/2003	1.3
n BDL > WQO	0	6/11/2003	0.8
n detected	120	8/5/2003	1.4
n BDL < WQO	21	8/6/2003	1.3
max/WQO	2.7800	10/15/2003	0.93
detected < WQO	140	10/15/2003	0.75
n < max DL	104	12/13/2003	1.4
		12/14/2003	0.95
		12/14/2003	2.4
		2/17/2004	0.92
		2/18/2004	6.74
		2/19/2004	3.1
		4/13/2004	1.19
		4/13/2004	4.38
		4/13/2004	3.97
		4/13/2004	3.97
		4/14/2004	0.99
		6/8/2004	1.18
		6/8/2004	1.29
		6/8/2004	0.7
		6/8/2004	1.57
		6/9/2004	1.33
		8/10/2004	1.72
		8/11/2004	-0.39
		10/5/2004	0.95
		10/5/2004	0.71
		10/6/2004	0.91
		10/6/2004	1.12
		10/19/2004	11.7
		10/19/2004	2.73
		10/20/2004	0.83
		10/20/2004	0.82
		12/7/2004	139

Percent Exceedance Template

12/8/2004	1.21
12/8/2004	0.91
1/28/2005	3.19
1/28/2005	3.28
1/28/2005	2.66
1/28/2005	-0.17
1/28/2005	4
1/28/2005	3.91
2/15/2005	1.18
2/16/2005	1.97
4/12/2005	1.97
4/12/2005	1.22
4/12/2005	1.62
6/7/2005	1
6/8/2005	1.44
8/2/2005	1.04
8/3/2005	-0.15
8/3/2005	0.95
8/3/2005	0.84
10/4/2005	-0.51
10/5/2005	0.66
12/1/2005	-0.74
12/1/2005	5.5
12/2/2005	-0.82
2/7/2006	-0.15
2/7/2006	2.79
2/7/2006	3.53
2/7/2006	2.6
2/8/2006	2.89
2/27/2006	4.19
2/27/2006	4.12
2/28/2006	-0.15
2/28/2006	2.96
2/28/2006	3.08
4/4/2006	3.63
4/5/2006	2.91
6/13/2006	4.97
6/13/2006	7.42
8/1/2006	7.67
8/3/2006	0.99
8/3/2006	0.97
8/3/2006	-0.5
10/10/2006	-0.7
10/11/2006	-0.9
11/3/2006	-1.25
11/3/2006	-2.37
12/9/2006	2.83
12/9/2006	4.88
12/9/2006	4.82
12/10/2006	-1.42
2/7/2007	1.16
2/8/2007	1.08
4/3/2007	-0.5
4/3/2007	1.01
4/4/2007	1.17
4/4/2007	1.18
6/5/2007	0.96
6/6/2007	1.13
6/6/2007	1.42
8/7/2007	0.78

Percent Exceedance Template

8/8/2007	0.92
8/8/2007	1.17
10/9/2007	0.5
10/9/2007	0.67
10/9/2007	0.5
10/10/2007	-0.5
10/10/2007	-0.5
10/10/2007	0.56
10/10/2007	0.62
12/4/2007	1.12
12/5/2007	-0.5
12/5/2007	-0.5
1/4/2008	-0.5
1/4/2008	5.26
1/4/2008	2.33
1/4/2008	2.3
1/4/2008	4.88
2/5/2008	-0.2
2/5/2008	2.1
2/6/2008	5.7
2/6/2008	2.2
4/1/2008	1
4/1/2008	1.2
6/11/2008	0.82
6/11/2008	2.5
6/11/2008	2

Percent Exceedance Summary

DATES

DATA

Parameter	Mercury, Methyl
Location	American River
Data Source	CMP
min date	9/3/2002
max date	6/11/2008

9/3/02	0.052
9/4/02	0.066
10/1/02	0.054
10/2/02	-0.025
11/5/02	-0.025
11/6/02	0.098
12/3/02	0.08
12/4/02	-0.025
1/7/03	0.058
1/8/03	-0.025
2/5/03	-0.025
2/6/03	0.034
2/16/03	-0.025
2/16/03	-0.025
3/4/03	0.042
3/5/03	0.039
3/15/03	0.05
3/15/03	-0.025
4/1/03	0.046
4/2/03	-0.025
5/6/03	0.039
5/7/03	-0.025
6/10/03	0.057
6/11/03	0.038
8/5/03	0.051
8/6/03	0.028
10/15/03	0.038
10/15/03	-0.025
12/13/03	-0.032
12/14/03	0.062
12/14/03	0.073
12/14/03	0.059
2/17/04	0.037
2/18/04	0.078
2/19/04	0.088
4/13/04	0.034
4/13/04	0.038
4/14/04	-0.025
6/8/04	0.063
6/8/04	0.083
6/9/04	-0.021
8/10/04	0.046
8/11/04	0.075
10/5/04	0.08
10/5/04	0.055
10/6/04	-0.019
10/19/04	0.236

Percent Exceedance stats

WQO	0.06
n	129
n detected > WQO	47
% detected > WQO	36.43

Other Stats

% detected	61.24
n BDL	50
n DLs	0
max detected	0.714
min detected	0.027
max BDL	<0.059
min BDL	<0.01
n BDL > max detected	0
n BDL > WQO	0
n detected	79
n BDL < WQO	50
max/WQO	11.9000
detected < WQO	82
n < max DL	80

10/19/04	0.091
10/20/04	-0.038
10/20/04	0.05
12/7/04	0.714
12/8/04	0.032
12/8/04	-0.029
1/28/05	0.063
1/28/05	0.065
1/28/05	0.047
1/28/05	0.081
1/28/05	0.115
2/15/05	0.027
2/16/05	-0.011
4/12/05	-0.029
4/12/05	-0.034
4/12/05	-0.014
6/7/05	-0.046
6/8/05	-0.026
8/2/05	-0.048
8/3/05	0.032
8/3/05	0.03
10/4/05	-0.033
10/5/05	0.04
12/1/05	0.069
12/1/05	0.122
12/2/05	-0.036
2/7/06	-0.025
2/7/06	-0.025
2/7/06	-0.025
2/7/06	-0.025
2/8/06	-0.025
2/27/06	-0.036
2/27/06	-0.044
2/27/06	0.049
2/28/06	-0.033
2/28/06	-0.025
4/4/06	0.059
4/5/06	-0.033
6/13/06	0.171
6/13/06	0.171
8/1/06	0.131
8/3/06	0.102
8/3/06	0.094
8/3/06	0.097
10/10/06	-0.05
10/11/06	0.129
10/11/06	0.068
11/3/06	-0.056
11/3/06	-0.059
12/9/06	0.074
12/9/06	0.093
12/10/06	0.406

2/7/07	-0.0347
2/8/07	0.125
4/3/07	-0.0528
4/3/07	-0.0482
4/4/07	-0.0268
4/4/07	-0.0581
6/5/07	0.137
6/6/07	0.0609
6/6/07	0.103
8/7/07	0.0564
8/8/07	-0.0428
8/8/07	-0.0487
10/9/07	0.0811
10/9/07	0.0334
10/9/07	0.101
10/10/07	0.0953
12/4/07	0.129
12/5/07	-0.01
1/4/08	0.0323
1/4/08	0.0601
1/4/08	0.0633
1/4/08	0.0839
2/5/08	0.0752
2/6/08	0.173
2/6/08	0.0613
4/1/08	0.0619
4/1/08	-0.0405
6/11/08	-0.0261
6/11/08	0.0882
6/11/08	-0.0366

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Indeno(1,2,3-cd)pyrene	10/01/02	-0.26
Location	American River	10/02/02	-1.8
Data Source	CMP	02/05/03	-0.453
		02/06/03	-0.256
		02/16/03	-1
min date	10/1/2002	02/16/03	-1
max date	6/11/2008	06/10/03	-0.325
		06/11/03	-0.301
Percent Exceedance stats		10/14/03	-1
WQO	4.4	10/15/03	-1
n	98	12/13/03	-2
n detected > WQO	4	12/14/03	-2
% detected > WQO	4.08	12/14/03	-2
		12/14/03	-2
		12/14/03	-2
Other Stats		02/17/04	-2
% detected	6.12	02/18/04	-2
n BDL	92	02/19/04	-2
n DLs	9	04/13/04	-2
max detected	6.9	04/13/04	-2
min detected	1.9	04/14/04	-2
max BDL	<5	06/08/04	-5
min BDL	<0.256	06/08/04	-5
n BDL > max detected	0	06/08/04	-5
n BDL > WQO	61	06/09/04	-5
n detected	6	10/05/04	-5
n BDL < WQO	31	10/05/04	-5
max/WQO	1.5682	10/06/04	-5
detected < WQO	94	10/19/04	-5
n < max DL	95	10/19/04	-5
		10/20/04	-5
		10/20/04	-5
		01/28/05	-5
		01/28/05	-5
		01/28/05	-5
		01/28/05	-5
		01/28/05	-5
		02/15/05	-5
		02/16/05	-5
		04/12/05	-5
		04/12/05	-5
		04/13/05	-5
		06/07/05	-5
		06/08/05	-5
		10/04/05	-5
		10/05/05	-5
		12/01/05	6.9
		12/01/05	-5
		12/02/05	-5
		02/07/06	-5
		02/07/06	-5
		02/07/06	-5
		02/07/06	-5
		02/08/06	-5

Percent Exceedance Template

02/27/06	-5
02/27/06	-5
02/28/06	-5
02/28/06	-5
02/28/06	-5
02/28/06	-5
06/13/06	-5
06/13/06	-5
6/14/06	-5
10/10/06	-5
10/11/06	-5
11/3/06	-5
11/3/06	-5
12/9/06	4.4
12/9/06	1.9
12/10/06	2.3
2/7/07	-5
2/8/07	-5
4/3/07	-5
4/3/07	-5
4/3/07	-5
4/4/07	-5
4/4/07	-5
4/4/07	-5
6/5/07	-5
6/6/07	-5
6/6/07	-5
10/9/07	-5
10/9/07	-5
10/9/07	-5
10/10/07	-5
10/10/07	-5
10/10/07	-5
1/4/08	-1
1/4/08	-1
1/4/08	5.3
1/4/08	-1
1/4/08	5.3
2/5/08	-1
2/5/08	-1
2/5/08	-1
2/6/08	-1
2/6/08	-1
6/11/08	-1
6/11/08	-1
6/11/08	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fecal Coliform	9/3/2002	50
Location	American River	9/4/2002	110
Data Source	CMP	10/1/2002	70
		10/2/2002	23
		11/5/2002	13
min date	9/3/2002	11/6/2002	23
max date	6/11/2008	12/3/2002	11
		12/4/2002	70
Percent Exceedance stats		1/7/2003	8
WQO	400	1/8/2003	50
n	127	2/5/2003	50
n detected > WQO	21	2/6/2003	4
% detected > WQO	16.54	2/16/2003	9000
		2/16/2003	70
		3/4/2003	8
Other Stats		3/5/2003	11
% detected	100.00	3/15/2003	5000
n BDL	0	3/15/2003	170
n DLs	0	4/1/2003	30
max detected	16000	4/2/2003	8
min detected	4	5/6/2003	110
max BDL	all detects	5/7/2003	23
min BDL	all detects	6/10/2003	23
n BDL > max detected	0	6/11/2003	30
n BDL > WQO	0	8/5/2003	2400
n detected	127	8/6/2003	50
n BDL < WQO	0	10/14/2003	30
max/WQO	40.0000	10/15/2003	50
detected < WQO	106	12/9/2003	27
n < max DL	0	12/10/2003	80
		12/14/2003	23
		12/14/2003	30
		12/14/2003	900
		12/15/2003	70
		2/17/2004	16000
		2/17/2004	30
		2/18/2004	280
		4/13/2004	13
		4/13/2004	30
		4/14/2004	30
		6/8/2004	30
		6/8/2004	23
		6/9/2004	26
		8/10/2004	50
		8/11/2004	50
		10/5/2004	11
		10/5/2004	8
		10/6/2004	17
		10/19/2004	16000
		10/19/2004	70
		10/20/2004	800
		12/7/2004	800
		12/8/2004	230
		12/8/2004	170
		1/28/2005	22
		1/28/2005	11

Percent Exceedance Template

1/28/2005	23
1/28/2005	22
2/15/2005	22
2/16/2005	50
4/12/2005	4
4/12/2005	11
4/13/2005	8
6/7/2005	4
6/8/2005	8
8/2/2005	80
8/3/2005	4
8/3/2005	17
10/4/2005	23
10/5/2005	30
12/1/2005	500
12/1/2005	170
12/2/2005	70
2/7/2006	80
2/7/2006	110
2/7/2006	500
2/8/2006	30
2/27/2006	220
2/27/2006	800
2/28/2006	300
2/28/2006	300
4/4/2006	140
4/5/2006	230
6/13/2006	17
6/13/2006	23
6/14/2006	170
8/1/2006	70
8/3/2006	23
8/3/2006	50
10/10/2006	500
10/11/2006	30
11/3/2006	2200
11/3/2006	800
11/3/2006	1300
12/9/2006	2300
12/9/2006	1700
12/10/2006	130
2/7/2007	23
2/8/2007	17
4/3/2007	22
4/3/2007	13
4/4/2007	50
4/4/2007	13
6/5/2007	8
6/6/2007	17
6/6/2007	21
8/7/2007	17
8/8/2007	50
8/8/2007	50
10/9/2007	13
10/9/2007	80
10/9/2007	13
10/10/2007	90
12/4/2007	110
12/5/2007	30
1/4/2008	2300
1/4/2008	1300

Percent Exceedance Template

1/4/2008	800
1/4/2008	1300
2/5/2008	50
2/6/2008	22
2/6/2008	30
4/1/2008	22
4/1/2008	4
6/11/2008	17
6/11/2008	80
6/11/2008	130

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Escherichia Coli	9/3/2002	13
Location	American River	9/4/2002	110
Data Source	CMP	10/1/2002	50
		10/2/2002	23
		11/5/2002	13
min date	9/3/2002	11/6/2002	23
max date	6/11/2008	12/3/2002	11
		12/4/2002	70
Percent Exceedance stats		1/7/2003	8
WQO	235	1/8/2003	50
n	127	2/5/2003	50
n detected > WQO	20	2/6/2003	4
% detected > WQO	15.75	2/16/2003	5000
		2/16/2003	70
		3/4/2003	4
Other Stats		3/5/2003	11
% detected	100.00	3/15/2003	2200
n BDL	0	3/15/2003	80
n DLs	0	4/1/2003	30
max detected	16000	4/2/2003	8
min detected	2	5/6/2003	110
max BDL	all detects	5/7/2003	23
min BDL	all detects	6/10/2003	23
n BDL > max detected	0	6/11/2003	30
n BDL > WQO	0	8/5/2003	230
n detected	127	8/6/2003	50
n BDL < WQO	0	10/14/2003	30
max/WQO	68.0851	10/15/2003	23
detected < WQO	107	12/9/2003	22
n < max DL	0	12/10/2003	80
		12/14/2003	23
		12/14/2003	17
		12/14/2003	700
		12/15/2003	70
		2/17/2004	16000
		2/17/2004	30
		2/18/2004	280
		4/13/2004	8
		4/13/2004	30
		4/14/2004	30
		6/8/2004	30
		6/8/2004	23
		6/9/2004	26
		8/10/2004	14
		8/11/2004	30
		10/5/2004	2
		10/5/2004	4
		10/6/2004	17
		10/19/2004	16000
		10/19/2004	70
		10/20/2004	800
		12/7/2004	280
		12/8/2004	80
		12/8/2004	110
		1/28/2005	17

Percent Exceedance Template

1/28/2005	8
1/28/2005	23
1/28/2005	17
2/15/2005	14
2/16/2005	50
4/12/2005	4
4/12/2005	7
4/13/2005	8
6/7/2005	2
6/8/2005	4
8/2/2005	27
8/3/2005	2
8/3/2005	11
10/4/2005	8
10/5/2005	30
12/1/2005	500
12/1/2005	170
12/2/2005	50
2/7/2006	80
2/7/2006	110
2/7/2006	220
2/8/2006	23
2/27/2006	170
2/27/2006	500
2/28/2006	300
2/28/2006	230
4/4/2006	110
4/5/2006	230
6/13/2006	17
6/13/2006	4
6/14/2006	170
8/1/2006	14
8/3/2006	8
8/3/2006	4
10/10/2006	50
10/11/2006	30
11/3/2006	500
11/3/2006	500
11/3/2006	300
12/9/2006	2300
12/9/2006	1700
12/10/2006	80
2/7/2007	13
2/8/2007	17
4/3/2007	22
4/3/2007	8
4/4/2007	50
4/4/2007	4
6/5/2007	8
6/6/2007	11
6/6/2007	21
8/7/2007	4
8/8/2007	50
8/8/2007	14
10/9/2007	13
10/9/2007	30
10/9/2007	8
10/10/2007	19
12/4/2007	110
12/5/2007	30

Percent Exceedance Template

1/4/2008	1300
1/4/2008	1300
1/4/2008	800
1/4/2008	800
2/5/2008	50
2/6/2008	22
2/6/2008	13
4/1/2008	22
4/1/2008	4
6/11/2008	11
6/11/2008	80
6/11/2008	130

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Chlorpyrifos	10/1/02	0.29
Location	American River	10/2/02	0.94
Data Source	CMP	2/5/03	-0.202
min date	10/1/2002	2/6/03	0.562
max date	6/11/2008	2/16/03	-1
Percent Exceedance stats		2/16/03	-1
WQO	14	6/10/03	0.407
n	98	6/11/03	-0.132
n detected > WQO	1	10/14/03	-1
% detected > WQO	1.02	10/15/03	-1
Other Stats		12/13/03	-2
% detected	18.37	12/14/03	-2
n BDL	80	12/14/03	-2
n DLs	5	12/14/03	1.7
max detected	39.9	2/17/04	-2
min detected	0.29	2/18/04	5
max BDL	<5	2/19/04	-2
min BDL	<0.132	4/13/04	-2
n BDL > max detected	0	4/13/04	-2
n BDL > WQO	0	4/14/04	-2
n detected	18	6/8/04	-5
n BDL < WQO	80	6/8/04	-5
max/WQO	2.8500	6/8/04	-5
detected < WQO	97	6/9/04	-5
n < max DL	93	6/9/04	-5
		10/5/04	-5
		10/5/04	-5
		10/6/04	-5
		10/19/04	39.9
		10/19/04	-5
		10/20/04	-5
		10/20/04	-5
		1/28/05	-5
		1/28/05	-5
		1/28/05	-5
		1/28/05	3.6
		1/28/05	-5
		2/15/05	-5
		2/16/05	-5
		4/12/05	-5
		4/12/05	-5
		4/13/05	-5
		6/7/05	-5
		6/8/05	-5
		10/4/05	-5
		10/5/05	-5
		12/1/05	13.5
		12/1/05	-5
		12/2/05	-5
		2/7/06	-5
		2/7/06	-5
		2/7/06	-5
		2/7/06	-5
		2/8/06	-5

Percent Exceedance Template

2/27/06	3.3
2/27/06	-5
2/28/06	-5
2/28/06	-5
2/28/06	-5
2/28/06	-5
6/13/06	-5
6/13/06	-5
6/14/06	-5
10/10/06	-5
10/11/06	-5
11/3/06	-5
11/3/06	3.1
12/9/06	3.2
12/9/06	3.7
12/10/06	1.8
2/7/07	-5
2/8/07	-5
4/3/07	-5
4/3/07	-5
4/3/07	-5
4/4/07	-5
4/4/07	-5
6/5/07	-5
6/6/07	-5
6/6/07	-5
10/9/07	-5
10/9/07	-5
10/9/07	-5
10/10/07	-5
10/10/07	1
10/10/07	-5
1/4/08	-1
1/4/08	4.6
1/4/08	5.4
1/4/08	-1
1/4/08	5.4
2/5/08	-1
2/5/08	-1
2/5/08	-1
2/6/08	-1
2/6/08	-1
6/11/08	-1
6/11/08	-1
6/11/08	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(k)fluoranthene	10/1/2002	-10
Location	American River	10/2/2002	-10
Data Source	CMP	2/5/2003	-20
min date	10/1/2002	2/6/2003	-20
max date	6/11/2008	2/16/2003	-1
Percent Exceedance stats		2/16/2003	-1
WQO	4.4	6/10/2003	-10
n	98	6/11/2003	-10
n detected > WQO	2	10/14/2003	-1
% detected > WQO	2.04	10/15/2003	-1
Other Stats		12/13/2003	-2
% detected	7.14	12/14/2003	-2
n BDL	91	12/14/2003	-2
n DLs	5	12/14/2003	-2
max detected	29.2	12/14/2003	2.6
min detected	2.6	2/17/2004	-2
max BDL	<20	2/18/2004	-2
min BDL	<1	2/19/2004	-2
n BDL > max detected	0	4/13/2004	-2
n BDL > WQO	67	4/13/2004	-2
n detected	7	4/14/2004	-2
n BDL < WQO	24	6/8/2004	-5
max/WQO	6.6364	6/8/2004	-5
detected < WQO	96	6/8/2004	-5
n < max DL	97	6/8/2004	-5
		6/9/2004	-5
		10/5/2004	-5
		10/5/2004	-5
		10/6/2004	-5
		10/19/2004	29.2
		10/19/2004	-5
		10/20/2004	-5
		10/20/2004	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	-5
		1/28/2005	-5
		2/15/2005	-5
		2/16/2005	-5
		4/12/2005	-5
		4/12/2005	-5
		4/13/2005	-5
		6/7/2005	-5
		6/8/2005	-5
		10/4/2005	-5
		10/5/2005	-5
		12/1/2005	11
		12/1/2005	-5
		12/2/2005	-5
		2/7/2006	-5
		2/7/2006	-5
		2/7/2006	-5
		2/7/2006	-5
		2/8/2006	-5

Percent Exceedance Template

2/27/2006	-5
2/27/2006	-5
2/28/2006	-5
2/28/2006	-5
2/28/2006	-5
2/28/2006	-5
6/13/2006	-5
6/13/2006	-5
6/14/2006	-5
10/10/2006	-5
10/11/2006	-5
11/3/2006	-5
11/3/2006	-5
12/9/2006	3.5
12/9/2006	4
12/10/2006	-5
2/7/2007	-5
2/8/2007	-5
4/3/2007	-5
4/3/2007	-5
4/3/2007	-5
4/4/2007	-5
04/04/2007	-5
6/5/2007	-5
6/6/2007	-5
06/06/2007	-5
10/9/2007	-5
10/9/2007	-5
10/09/2007	-5
10/10/2007	-5
10/10/2007	-5
10/10/2007	-5
1/4/2008	-1
1/4/2008	-1
1/4/2008	2.8
1/4/2008	-1
01/04/2008	2.8
2/5/2008	-1
2/5/2008	-1
2/5/2008	-1
2/6/2008	-1
02/06/2008	-1
6/11/2008	-1
6/11/2008	-1
6/11/2008	-1

Percent Exceedance Summary

DATES DATA

Parameter	Aluminum, Dissolved
Location	Sacramento River
Data Source	CMP
min date	9/3/2002
max date	6/11/2008

6/9/04	19.50
10/6/04	8.30
10/6/04	8.70
10/19/04	8.90
1/28/05	21.70
2/16/05	17.80
2/16/05	17.40
4/13/05	35.20
6/8/05	14.30
6/8/05	14.50
10/5/05	-18.00
12/1/05	10.60
2/8/06	55.10
2/27/06	42.00
6/14/06	48.00
6/14/06	54.20
10/11/06	20.20
10/11/06	-19.60
11/3/06	-11.50
12/9/06	-15.30
2/8/07	18.80
4/3/07	15.70
6/5/07	-4.00
6/5/07	13.90
10/10/07	10.70
1/4/08	10.10
6/9/04	139.00
10/6/04	11.10
2/16/05	15.90
6/8/05	21.40
10/5/05	15.00
2/8/06	52.50
6/14/06	40.60
10/11/06	-19.30
2/8/07	16.90
2/8/07	15.90
6/5/07	-4.00
10/10/07	7.60
2/6/08	52.00
2/6/08	260.00
6/11/08	13.00
6/11/08	38.00
2/5/08	35.00
2/16/05	16.40
10/20/04	-3.40
6/7/05	28.40
10/4/05	17.00

Percent Exceedance stats

WQO	200
n	63
n detected > WQO	1
% detected > WQO	1.59

Other Stats

% detected	80.95
n BDL	12
n DLs	0
max detected	260
min detected	5.6
max BDL	<19.6
min BDL	<3.4
n BDL > max detected	0
n BDL > WQO	0
n detected	51
n BDL < WQO	12
max/WQO	1.3000
detected < WQO	62
n < max DL	40

1/28/05	24.00
10/5/04	-12.90
4/13/05	27.70
6/8/04	21.10
12/1/05	12.00
2/7/06	59.90
12/9/06	-18.70
6/5/07	-4.00
11/3/06	-12.10
2/27/06	38.60
6/13/06	59.60
4/3/07	11.20
10/10/06	23.40
1/4/08	16.60
10/9/07	6.40
2/7/07	5.60

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fecal Coliform	9/3/02	23.00
Location	Sacramento River	9/4/02	30.00
Data Source	CMP	10/1/02	7.00
min date	9/3/2002	10/2/02	13.00
max date	6/12/2008	11/5/02	17.00
Percent Exceedance stats		11/6/02	4.00
WQO	400	12/3/02	8.00
n	126	12/4/02	23.00
n detected > WQO	15	1/7/03	70.00
% detected > WQO	11.90	1/8/03	23.00
Other Stats		2/5/03	14.00
% detected	100.00	2/6/03	11.00
n BDL	0	2/16/03	30.00
n DLs	0	2/16/03	70.00
max detected	2400	3/4/03	13.00
min detected	4	3/5/03	11.00
max BDL	all detects	3/15/03	2400.00
min BDL	all detects	3/15/03	27.00
n BDL > max detected	0	4/1/03	17.00
n BDL > WQO	0	4/2/03	30.00
n detected	126	5/6/03	50.00
n BDL < WQO	0	5/7/03	500.00
max/WQO	6.0000	6/10/03	22.00
detected < WQO	111	6/11/03	17.00
n < max DL	0	8/5/03	50.00
		8/6/03	170.00
		10/14/03	13.00
		10/15/03	11.00
		10/15/03	13.00
		12/10/03	300.00
		12/11/03	500.00
		12/14/03	300.00
		12/14/03	500.00
		2/17/04	500.00
		2/18/04	190.00
		2/18/04	700.00
		2/18/04	700.00
		4/13/04	17.00
		4/13/04	8.00
		6/8/04	50.00
		6/9/04	70.00
		6/9/04	23.00
		8/10/04	50.00
		8/11/04	50.00
		8/11/04	23.00
		10/5/04	4.00
		10/6/04	13.00
		10/6/04	4.00
		10/6/04	13.00
		10/19/04	30.00
		10/20/04	50.00
		12/7/04	17.00

Percent Exceedance Template

12/8/04	80.00
12/8/04	130.00
1/28/05	50.00
1/28/05	50.00
2/15/05	14.00
2/16/05	500.00
2/16/05	700.00
4/13/05	80.00
4/13/05	50.00
6/7/05	30.00
6/8/05	80.00
6/8/05	23.00
8/2/05	130.00
8/3/05	50.00
8/3/05	50.00
10/4/05	17.00
10/5/05	30.00
10/5/05	30.00
12/1/05	13.00
12/1/05	130.00
2/7/06	130.00
2/8/06	80.00
2/8/06	30.00
2/27/06	7.00
2/27/06	800.00
4/4/06	500.00
4/5/06	300.00
4/5/06	800.00
4/5/06	700.00
6/13/06	23.00
6/14/06	23.00
6/14/06	13.00
6/14/06	23.00
8/1/06	50.00
8/3/06	130.00
8/3/06	140.00
10/10/06	4.00
10/11/06	130.00
10/11/06	80.00
10/11/06	130.00
11/3/06	17.00
11/3/06	300.00
12/9/06	50.00
12/9/06	110.00
12/9/06	170.00
2/7/07	11.00
2/8/07	17.00
2/8/07	26.00
2/8/07	23.00
4/3/07	7.00
4/3/07	13.00
4/3/07	7.00
6/5/07	7.00
6/5/07	4.00
6/5/07	50.00
6/5/07	11.00
8/7/07	170.00

Percent Exceedance Template

8/8/07	90.00
8/8/07	80.00
10/9/07	11.00
10/10/07	230.00
10/10/07	130.00
12/4/07	11.00
12/5/07	8.00
12/5/07	8.00
12/5/07	11.00
1/4/08	17.00
2/5/08	500.00
2/6/08	300.00
2/6/08	1100.00
4/1/08	11.00
4/2/08	7.00
6/11/08	23.00
6/12/08	280.00

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Escherichia Coli	9/3/02	23.00
Location	Sacramento River	9/4/02	2.00
Data Source	CMP	10/1/02	4.00
min date	9/3/2002	10/2/02	8.00
max date	6/12/2008	11/5/02	17.00
Percent Exceedance stats		11/6/02	4.00
WQO	235	12/3/02	8.00
n	126	12/4/02	23.00
n detected > WQO	17	1/7/03	50.00
% detected > WQO	13.49	1/8/03	23.00
Other Stats		2/5/03	11.00
% detected	100.00	2/6/03	8.00
n BDL	0	2/16/03	30.00
n DLs	0	2/16/03	22.00
max detected	1100	3/4/03	13.00
min detected	2	3/5/03	11.00
max BDL	all detects	3/15/03	800.00
min BDL	all detects	3/15/03	22.00
n BDL > max detected	0	4/1/03	11.00
n BDL > WQO	0	4/2/03	30.00
n detected	126	5/6/03	50.00
n BDL < WQO	0	5/7/03	500.00
max/WQO	4.6809	6/10/03	22.00
detected < WQO	109	6/11/03	11.00
n < max DL	0	8/5/03	22.00
		8/6/03	80.00
		10/14/03	13.00
		10/15/03	7.00
		10/15/03	13.00
		12/10/03	300.00
		12/11/03	300.00
		12/14/03	130.00
		12/14/03	220.00
		2/17/04	300.00
		2/18/04	190.00
		2/18/04	700.00
		2/18/04	700.00
		4/13/04	11.00
		4/13/04	8.00
		6/8/04	50.00
		6/9/04	17.00
		6/9/04	23.00
		8/10/04	30.00
		8/11/04	30.00
		8/11/04	13.00
		10/5/04	2.00
		10/6/04	13.00
		10/6/04	4.00
		10/6/04	8.00
		10/19/04	30.00
		10/20/04	50.00
		12/7/04	17.00

Percent Exceedance Template

12/8/04	80.00
12/8/04	130.00
1/28/05	30.00
1/28/05	22.00
2/15/05	14.00
2/16/05	500.00
2/16/05	700.00
4/13/05	80.00
4/13/05	50.00
6/7/05	23.00
6/8/05	27.00
6/8/05	23.00
8/2/05	30.00
8/3/05	13.00
8/3/05	4.00
10/4/05	9.00
10/5/05	17.00
10/5/05	8.00
12/1/05	13.00
12/1/05	50.00
2/7/06	80.00
2/8/06	80.00
2/8/06	30.00
2/27/06	7.00
2/27/06	800.00
4/4/06	500.00
4/5/06	230.00
4/5/06	800.00
4/5/06	700.00
6/13/06	8.00
6/14/06	13.00
6/14/06	8.00
6/14/06	8.00
8/1/06	8.00
8/3/06	14.00
8/3/06	8.00
10/10/06	2.00
10/11/06	80.00
10/11/06	50.00
10/11/06	80.00
11/3/06	17.00
11/3/06	300.00
12/9/06	50.00
12/9/06	110.00
12/9/06	170.00
2/7/07	11.00
2/8/07	17.00
2/8/07	22.00
2/8/07	23.00
4/3/07	4.00
4/3/07	13.00
4/3/07	7.00
6/5/07	7.00
6/5/07	4.00
6/5/07	6.00
6/5/07	7.00
8/7/07	14.00

Percent Exceedance Template

8/8/07	13.00
8/8/07	8.00
10/9/07	8.00
10/10/07	50.00
10/10/07	80.00
12/4/07	11.00
12/5/07	8.00
12/5/07	4.00
12/5/07	7.00
1/4/08	17.00
2/5/08	500.00
2/6/08	300.00
2/6/08	1100.00
4/1/08	11.00
4/2/08	4.00
6/11/08	13.00
6/12/08	14.00

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Diazinon	9/3/02	-0.05
Location	Sacramento River	9/4/02	-0.05
Data Source	CMP	9/4/02	-0.05
		10/1/02	-0.05
min date	9/3/2002	10/1/02	-0.05
max date	6/12/2008	10/2/02	-0.05
		11/5/02	-0.05
		11/6/02	-0.05
		11/6/02	-0.05
Percent Exceedance stats		11/6/02	-0.05
WQO	0.05	1/7/03	-0.05
n	140	1/8/03	-0.05
n detected > WQO	2	1/8/03	-0.05
% detected > WQO	1.43	2/5/03	-0.05
		2/5/03	-0.05
		2/6/03	-0.05
Other Stats		2/6/03	-0.05
% detected	2.86	2/16/03	-0.05
n BDL	136	2/16/03	-0.05
n DLs	3	3/4/03	-0.05
max detected	0.061	3/5/03	-0.05
min detected	0.011	3/5/03	-0.05
max BDL	<0.1	3/15/03	0.06
min BDL	<0.004	3/15/03	-0.05
n BDL > max detected	1	5/6/03	-0.05
n BDL > WQO	133	5/7/03	-0.05
n detected	4	5/7/03	-0.05
n BDL < WQO	3	6/10/03	-0.05
max/WQO	1.2200	6/11/03	-0.05
detected < WQO	138	6/11/03	-0.05
n < max DL	140	8/5/03	-0.05
		8/6/03	-0.05
		8/6/03	-0.05
		10/14/03	-0.05
		10/15/03	-0.05
		10/15/03	-0.05
		10/15/03	-0.05
		12/11/03	-0.05
		12/14/03	-0.05
		12/14/03	-0.10
		2/17/04	-0.05
		2/18/04	-0.05
		2/18/04	-0.05
		2/18/04	0.06
		2/18/04	-0.05
		4/13/04	-0.05
		4/13/04	-0.05
		4/13/04	-0.05
		6/8/04	-0.05
		6/9/04	-0.05
		6/9/04	-0.05
		8/10/04	-0.05
		8/11/04	-0.05
		8/11/04	-0.05
		8/11/04	-0.05
		10/5/04	-0.05
		10/6/04	-0.05

Percent Exceedance Template

10/6/04	-0.05
10/6/04	-0.05
10/19/04	-0.05
10/20/04	-0.05
12/7/04	-0.05
12/8/04	-0.05
12/8/04	-0.05
1/28/05	-0.05
1/28/05	0.03
2/15/05	-0.05
2/16/05	-0.05
2/16/05	-0.05
2/16/05	-0.05
4/13/05	-0.05
4/13/05	-0.05
6/7/05	-0.05
6/8/05	-0.05
6/8/05	-0.05
6/8/05	-0.05
8/2/05	-0.05
8/3/05	-0.05
8/3/05	-0.05
10/4/05	-0.05
10/5/05	-0.05
10/5/05	-0.05
10/5/05	-0.05
12/1/05	-0.05
12/1/05	-0.05
12/1/05	-0.05
2/7/06	-0.05
2/8/06	-0.05
2/8/06	-0.05
2/27/06	-0.05
2/27/06	-0.05
3/7/06	-0.05
3/7/06	0.01
4/4/06	-0.05
4/5/06	-0.05
4/5/06	-0.05
4/5/06	-0.05
6/13/06	-0.05
6/14/06	-0.05
6/14/06	-0.05
6/14/06	-0.05
8/1/06	-0.05
8/3/06	-0.05
8/3/06	-0.05
10/10/06	-0.05
10/11/06	-0.05
10/11/06	-0.05
10/11/06	-0.05
11/3/06	-0.05
11/3/06	-0.05
12/9/06	-0.05
12/9/06	-0.05
12/9/06	-0.05
2/7/07	-0.05
2/8/07	-0.05
2/8/07	-0.05
2/8/07	-0.05

Percent Exceedance Template

4/3/07	-0.05
4/3/07	-0.05
4/3/07	-0.05
6/5/07	-0.05
6/5/07	-0.05
6/5/07	-0.05
6/5/07	-0.05
6/5/07	-0.05
8/7/07	-0.05
8/8/07	-0.05
8/8/07	-0.05
10/9/07	0.00
10/10/07	0.00
10/10/07	0.00
12/4/07	-0.05
12/5/07	-0.05
12/5/07	-0.05
12/5/07	-0.05
1/4/08	-0.05
2/5/08	-0.05
2/6/08	-0.05
2/6/08	-0.05
4/1/08	-0.05
4/2/08	-0.05
6/11/08	-0.05
6/12/08	-0.05

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Turbidity	9/3/02	19.60
Location	Sacramento River	9/3/02	19.60
Data Source	CMP	9/4/02	9.10
		9/4/02	15.40
		9/4/02	9.10
min date	9/3/2002	9/4/02	15.40
max date	6/12/2008	10/1/02	14.00
		10/1/02	14.00
Percent Exceedance stats		10/2/02	12.00
WQO	150	10/2/02	11.80
n	296	10/2/02	12.00
n detected > WQO	8	10/2/02	11.80
% detected > WQO	2.70	11/5/02	12.30
		11/5/02	12.30
Other Stats		11/6/02	5.00
% detected	100.00	11/6/02	5.20
n BDL	0	11/6/02	5.00
n DLs	0	11/6/02	5.20
max detected	260	12/3/02	21.00
min detected	3.2	12/3/02	21.00
max BDL	all detects	12/4/02	6.60
min BDL	all detects	12/4/02	7.10
n BDL > max detected	0	12/4/02	6.60
n BDL > WQO	0	12/4/02	7.10
n detected	296	1/7/03	87.00
n BDL < WQO	0	1/7/03	87.00
max/WQO	1.7333	1/8/03	83.00
detected < WQO	288	1/8/03	79.00
n < max DL	0	1/8/03	83.00
		1/8/03	79.00
		2/5/03	38.00
		2/5/03	34.00
		2/5/03	38.00
		2/5/03	34.00
		2/6/03	30.00
		2/6/03	30.00
		2/16/03	30.00
		2/16/03	40.00
		2/16/03	30.00
		2/16/03	40.00
		3/4/03	22.00
		3/4/03	22.00
		3/5/03	19.60
		3/5/03	18.00
		3/5/03	19.60
		3/5/03	18.00
		3/15/03	17.00
		3/15/03	29.00
		3/15/03	17.00
		3/15/03	29.00
		4/1/03	31.50
		4/1/03	31.50

Percent Exceedance Template

4/2/03	21.00
4/2/03	22.50
4/2/03	21.00
4/2/03	22.50
5/6/03	80.00
5/6/03	80.00
5/7/03	66.00
5/7/03	71.00
5/7/03	66.00
5/7/03	71.00
6/10/03	17.00
6/10/03	17.00
6/11/03	16.00
6/11/03	24.00
6/11/03	16.00
6/11/03	24.00
8/5/03	20.00
8/5/03	20.00
8/6/03	15.00
8/6/03	18.00
8/6/03	15.00
8/6/03	18.00
10/14/03	18.00
10/14/03	18.00
10/15/03	6.00
10/15/03	5.40
10/15/03	6.00
10/15/03	5.40
12/10/03	94.00
12/10/03	180.00
12/10/03	94.00
12/10/03	180.00
12/10/03	180.00
12/10/03	180.00
12/11/03	79.00
12/11/03	79.00
12/11/03	94.00
12/11/03	94.00
12/11/03	79.00
12/11/03	79.00
12/14/03	65.00
12/14/03	65.00
12/14/03	65.00
12/14/03	65.00
12/14/03	38.00
12/14/03	38.00
2/17/04	75.00
2/17/04	75.00
2/18/04	63.00
2/18/04	68.00
2/18/04	63.00
2/18/04	68.00
2/18/04	63.00
2/18/04	63.00
4/13/04	21.00
4/13/04	21.00
4/13/04	24.00

Percent Exceedance Template

4/13/04	24.00
4/13/04	25.00
4/13/04	25.00
6/8/04	12.00
6/8/04	12.00
6/9/04	11.00
6/9/04	11.00
8/10/04	11.00
8/10/04	11.00
8/11/04	9.40
8/11/04	7.60
8/11/04	7.50
8/11/04	9.40
8/11/04	7.60
8/11/04	7.50
8/11/04	9.70
8/11/04	8.50
8/11/04	9.70
8/11/04	8.50
10/5/04	7.00
10/5/04	7.00
10/6/04	6.50
10/6/04	6.50
10/6/04	7.00
10/6/04	6.40
10/6/04	7.00
10/6/04	6.40
10/19/04	6.40
10/19/04	6.40
10/20/04	6.70
10/20/04	6.70
12/7/04	16.00
12/7/04	16.00
12/8/04	7.30
12/8/04	7.30
12/8/04	9.10
12/8/04	9.10
1/28/05	24.00
1/28/05	24.00
1/28/05	24.00
1/28/05	24.00
1/28/05	48.00
1/28/05	48.00
2/15/05	19.00
2/15/05	19.00
2/16/05	12.00
2/16/05	11.00
2/16/05	12.00
2/16/05	11.00
2/16/05	11.00
2/16/05	9.80
2/16/05	11.00
2/16/05	9.80
4/13/05	22.00
4/13/05	22.00
4/13/05	20.00
4/13/05	20.00

Percent Exceedance Template

4/13/05	19.00
4/13/05	19.00
6/7/05	22.00
6/7/05	22.00
6/8/05	14.00
6/8/05	14.00
6/8/05	14.00
6/8/05	14.00
6/8/05	11.00
6/8/05	11.00
6/8/05	11.00
6/8/05	11.00
8/2/05	7.70
8/2/05	7.70
8/3/05	9.20
8/3/05	9.20
8/3/05	13.00
8/3/05	13.00
10/4/05	12.00
10/4/05	12.00
10/5/05	7.00
10/5/05	7.00
10/5/05	6.20
10/5/05	6.00
10/5/05	6.20
10/5/05	6.00
12/1/05	13.00
12/1/05	13.00
12/1/05	11.00
12/1/05	11.00
12/1/05	12.00
12/1/05	12.00
2/7/06	81.00
2/7/06	81.00
2/8/06	58.00
2/8/06	58.00
2/8/06	55.00
2/8/06	55.00
2/27/06	25.00
2/27/06	25.00
2/27/06	19.00
2/27/06	19.00
3/7/06	40.00
3/7/06	40.00
3/7/06	39.00
3/7/06	39.00
4/4/06	66.00
4/4/06	66.00
4/5/06	38.00
4/5/06	38.00
4/5/06	43.00
4/5/06	43.00
6/13/06	20.00
6/13/06	20.00
6/14/06	13.00
6/14/06	13.00
6/14/06	18.00

Percent Exceedance Template

6/14/06	18.00
8/1/06	13.00
8/1/06	13.00
8/3/06	12.00
8/3/06	12.00
8/3/06	16.00
8/3/06	16.00
10/10/06	9.10
10/10/06	9.10
10/11/06	7.10
10/11/06	7.10
10/11/06	6.20
10/11/06	6.20
11/3/06	11.00
11/3/06	11.00
11/3/06	5.90
11/3/06	5.90
12/9/06	11.00
12/9/06	11.00
12/9/06	10.00
12/9/06	10.00
12/9/06	11.00
12/9/06	11.00
2/7/07	23.00
2/7/07	23.00
2/8/07	14.00
2/8/07	14.00
2/8/07	16.00
2/8/07	16.00
4/3/07	9.20
4/3/07	9.20
4/3/07	6.80
4/3/07	6.80
4/3/07	8.70
4/3/07	8.70
6/5/07	6.20
6/5/07	6.20
6/5/07	6.40
6/5/07	6.40
6/5/07	12.00
6/5/07	12.00
8/7/07	12.00
8/7/07	12.00
8/8/07	7.40
8/8/07	7.40
8/8/07	6.80
8/8/07	6.80
10/9/07	4.90
10/9/07	4.90
10/10/07	3.20
10/10/07	3.20
10/10/07	4.80
10/10/07	4.80
12/4/07	9.30
12/4/07	9.30
12/5/07	6.30
12/5/07	6.30

Percent Exceedance Template

12/5/07	11.00
12/5/07	11.00
1/4/08	30.00
1/4/08	30.00
2/5/08	200.00
2/5/08	200.00
2/6/08	260.00
2/6/08	260.00
4/1/08	9.30
4/1/08	9.30
4/2/08	5.70
4/2/08	5.70
6/11/08	14.00
6/11/08	14.00
6/12/08	12.00
6/12/08	12.00

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Specific Conductance	9/3/02	202.00
Location	Sacramento River	9/3/02	202.00
Data Source	CMP	9/4/02	191.00
min date	9/3/2002	9/4/02	196.00
max date	6/12/2008	10/1/02	150.00
Percent Exceedance stats		10/1/02	150.00
WQO	240	10/2/02	142.00
n	260	10/2/02	149.00
n detected > WQO	10	10/2/02	142.00
% detected > WQO	3.85	10/2/02	149.00
Other Stats		11/5/02	151.00
% detected	100.00	11/5/02	151.00
n BDL	0	11/6/02	167.00
n DLs	0	11/6/02	178.00
max detected	260	11/6/02	167.00
min detected	58	11/6/02	178.00
max BDL	all detects	11/6/02	178.00
min BDL	all detects	12/3/02	164.00
n BDL > max detected	0	12/3/02	164.00
n BDL > WQO	0	12/3/02	164.00
n detected	260	12/4/02	198.00
n BDL < WQO	0	12/4/02	199.00
max/WQO	1.0833	12/4/02	199.00
detected < WQO	250	12/4/02	199.00
n < max DL	0	12/4/02	199.00
		1/7/03	150.00
		1/7/03	150.00
		1/7/03	150.00
		1/8/03	152.00
		1/8/03	150.00
		1/8/03	152.00
		1/8/03	150.00
		1/8/03	150.00
		2/16/03	123.00
		2/16/03	145.00
		2/16/03	123.00
		2/16/03	145.00
		3/4/03	175.00
		3/4/03	175.00
		3/5/03	170.00
		3/5/03	177.00
		3/5/03	170.00
		3/5/03	177.00
		3/15/03	171.00
		3/15/03	171.00
		4/1/03	157.00
		4/1/03	157.00
		4/2/03	153.00
		4/2/03	161.00
		4/2/03	153.00
		4/2/03	161.00
		5/6/03	118.00
		5/6/03	118.00
		5/7/03	118.00

Percent Exceedance Template

5/7/03	120.00
5/7/03	118.00
5/7/03	120.00
6/10/03	136.00
6/10/03	136.00
6/11/03	127.00
6/11/03	128.00
6/11/03	127.00
6/11/03	128.00
8/5/03	134.00
8/5/03	134.00
8/6/03	122.00
8/6/03	129.00
8/6/03	122.00
8/6/03	129.00
10/14/03	140.00
10/14/03	140.00
10/15/03	130.00
10/15/03	140.00
10/15/03	130.00
10/15/03	140.00
12/10/03	170.00
12/10/03	170.00
12/11/03	160.00
12/11/03	160.00
12/11/03	170.00
12/11/03	170.00
12/14/03	150.00
12/14/03	150.00
12/14/03	170.00
12/14/03	170.00
2/17/04	260.00
2/17/04	260.00
2/18/04	180.00
2/18/04	180.00
2/18/04	190.00
2/18/04	190.00
4/13/04	120.00
4/13/04	120.00
4/13/04	120.00
4/13/04	120.00
4/13/04	130.00
4/13/04	130.00
6/8/04	150.00
6/8/04	150.00
6/9/04	150.00
6/9/04	150.00
6/9/04	140.00
6/9/04	140.00
8/10/04	150.00
8/10/04	150.00
8/11/04	150.00
8/11/04	150.00
8/11/04	160.00
8/11/04	160.00
10/5/04	140.00

Percent Exceedance Template

10/5/04	140.00
10/6/04	150.00
10/6/04	150.00
10/6/04	140.00
10/6/04	140.00
10/19/04	130.00
10/19/04	130.00
10/20/04	150.00
10/20/04	150.00
12/7/04	250.00
12/7/04	250.00
12/8/04	210.00
12/8/04	210.00
12/8/04	210.00
12/8/04	210.00
1/28/05	250.00
1/28/05	250.00
1/28/05	210.00
1/28/05	210.00
2/15/05	250.00
2/15/05	250.00
2/16/05	220.00
2/16/05	220.00
2/16/05	200.00
2/16/05	200.00
4/13/05	180.00
4/13/05	180.00
4/13/05	160.00
4/13/05	160.00
4/13/05	150.00
4/13/05	150.00
6/7/05	160.00
6/7/05	160.00
6/8/05	120.00
6/8/05	120.00
6/8/05	110.00
6/8/05	110.00
8/2/05	180.00
8/2/05	180.00
8/3/05	160.00
8/3/05	160.00
8/3/05	150.00
8/3/05	150.00
10/4/05	150.00
10/4/05	150.00
10/5/05	140.00
10/5/05	140.00
10/5/05	130.00
10/5/05	130.00
12/1/05	190.00
12/1/05	190.00
12/1/05	190.00
12/1/05	190.00
12/1/05	190.00
12/1/05	190.00
12/1/05	190.00
2/7/06	110.00

Percent Exceedance Template

2/7/06	110.00
2/8/06	97.00
2/8/06	97.00
2/8/06	100.00
2/8/06	100.00
2/27/06	130.00
2/27/06	130.00
2/27/06	130.00
2/27/06	130.00
3/7/06	90.00
3/7/06	90.00
3/7/06	95.00
3/7/06	95.00
4/4/06	110.00
4/4/06	110.00
4/5/06	95.00
4/5/06	95.00
4/5/06	98.00
4/5/06	98.00
6/13/06	160.00
6/13/06	160.00
6/14/06	190.00
6/14/06	190.00
6/14/06	180.00
6/14/06	180.00
8/1/06	160.00
8/1/06	160.00
8/3/06	150.00
8/3/06	150.00
8/3/06	140.00
8/3/06	140.00
10/10/06	160.00
10/10/06	160.00
10/11/06	140.00
10/11/06	140.00
10/11/06	140.00
10/11/06	140.00
11/3/06	170.00
11/3/06	170.00
11/3/06	140.00
11/3/06	140.00
12/9/06	58.00
12/9/06	58.00
12/9/06	170.00
12/9/06	170.00
12/9/06	180.00
12/9/06	180.00
2/7/07	200.00
2/7/07	200.00
2/8/07	190.00
2/8/07	190.00
2/8/07	200.00
2/8/07	200.00
4/3/07	140.00
4/3/07	140.00
4/3/07	130.00

Percent Exceedance Template

4/3/07	130.00
4/3/07	140.00
4/3/07	140.00
6/5/07	210.00
6/5/07	210.00
6/5/07	220.00
6/5/07	220.00
6/5/07	240.00
6/5/07	240.00
8/7/07	180.00
8/7/07	180.00
8/8/07	180.00
8/8/07	180.00
8/8/07	190.00
8/8/07	190.00
10/9/07	180.00
10/9/07	180.00
10/10/07	170.00
10/10/07	170.00
10/10/07	180.00
10/10/07	180.00
12/4/07	200.00
12/4/07	200.00
12/5/07	200.00
12/5/07	200.00
12/5/07	190.00
12/5/07	190.00
1/4/08	230.00
1/4/08	230.00
2/5/08	170.00
2/5/08	170.00
2/6/08	150.00
2/6/08	150.00
4/1/08	210.00
4/1/08	210.00
4/2/08	190.00
4/2/08	190.00
6/11/08	170.00
6/11/08	170.00
6/12/08	150.00
6/12/08	150.00

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Solids, Total Dissolved	9/3/2002	120.00
Location	Sacramento River	9/3/2002	120.00
Data Source	CMP	9/4/2002	110.00
		9/4/2002	82.00
		9/4/2002	110.00
min date	9/3/2002	9/4/2002	82.00
max date	6/12/2008	10/1/2002	93.00
		10/1/2002	93.00
Percent Exceedance stats		10/2/2002	110.00
WQO	125	10/2/2002	97.00
n	300	10/2/2002	110.00
n detected > WQO	82	10/2/2002	97.00
% detected > WQO	27.33	11/5/2002	120.00
		11/5/2002	120.00
Other Stats		11/6/2002	130.00
% detected	95.33	11/6/2002	97.00
n BDL	14	11/6/2002	130.00
n DLs	7	11/6/2002	97.00
max detected	190	12/3/2002	130.00
min detected	33	12/3/2002	130.00
max BDL	<100	12/4/2002	120.00
min BDL	<35	12/4/2002	120.00
n BDL > max detected	0	12/4/2002	120.00
n BDL > WQO	0	12/4/2002	120.00
n detected	286	1/7/2003	120.00
n BDL < WQO	14	1/7/2003	120.00
max/WQO	1.5200	1/8/2003	120.00
detected < WQO	218	1/8/2003	130.00
n < max DL	102	1/8/2003	120.00
		1/8/2003	130.00
		2/5/2003	120.00
		2/5/2003	110.00
		2/5/2003	120.00
		2/5/2003	110.00
		2/6/2003	120.00
		2/6/2003	120.00
		2/16/2003	89.00
		2/16/2003	140.00
		2/16/2003	89.00
		2/16/2003	140.00
		3/4/2003	120.00
		3/4/2003	120.00
		3/5/2003	140.00
		3/5/2003	140.00
		3/5/2003	140.00
		3/5/2003	140.00
		3/15/2003	78.00
		3/15/2003	120.00
		3/15/2003	78.00
		3/15/2003	120.00
		4/1/2003	100.00
		4/1/2003	100.00
		4/2/2003	99.00

Percent Exceedance Template

4/2/2003	91.00
4/2/2003	99.00
4/2/2003	91.00
5/6/2003	81.00
5/6/2003	81.00
5/7/2003	89.00
5/7/2003	64.00
5/7/2003	89.00
5/7/2003	64.00
6/10/2003	180.00
6/10/2003	180.00
6/11/2003	130.00
6/11/2003	91.00
6/11/2003	130.00
6/11/2003	91.00
8/5/2003	86.00
8/5/2003	86.00
8/6/2003	76.00
8/6/2003	83.00
8/6/2003	76.00
8/6/2003	83.00
10/14/2003	91.00
10/14/2003	91.00
10/15/2003	100.00
10/15/2003	90.00
10/15/2003	100.00
10/15/2003	90.00
12/10/2003	120.00
12/10/2003	120.00
12/11/2003	100.00
12/11/2003	100.00
12/11/2003	110.00
12/11/2003	110.00
12/14/2003	110.00
12/14/2003	110.00
12/14/2003	160.00
12/14/2003	160.00
2/17/2004	180.00
2/17/2004	180.00
2/18/2004	110.00
2/18/2004	120.00
2/18/2004	110.00
2/18/2004	120.00
2/18/2004	95.00
2/18/2004	95.00
4/13/2004	81.00
4/13/2004	81.00
4/13/2004	73.00
4/13/2004	73.00
4/13/2004	110.00
4/13/2004	110.00
6/8/2004	110.00
6/8/2004	110.00
6/9/2004	110.00
6/9/2004	110.00
8/10/2004	140.00
8/10/2004	140.00
8/11/2004	140.00

Percent Exceedance Template

8/11/2004	140.00
8/11/2004	150.00
8/11/2004	120.00
8/11/2004	150.00
8/11/2004	120.00
10/5/2004	67.00
10/5/2004	67.00
10/6/2004	98.00
10/6/2004	98.00
10/6/2004	79.00
10/6/2004	90.00
10/6/2004	99.00
10/6/2004	79.00
10/6/2004	90.00
10/6/2004	99.00
10/19/2004	120.00
10/19/2004	120.00
10/20/2004	110.00
10/20/2004	110.00
12/7/2004	190.00
12/7/2004	190.00
12/8/2004	150.00
12/8/2004	150.00
12/8/2004	150.00
12/8/2004	160.00
12/8/2004	160.00
1/28/2005	180.00
1/28/2005	180.00
1/28/2005	180.00
1/28/2005	180.00
1/28/2005	140.00
1/28/2005	140.00
2/15/2005	170.00
2/15/2005	170.00
2/16/2005	170.00
2/16/2005	170.00
2/16/2005	150.00
2/16/2005	170.00
2/16/2005	150.00
2/16/2005	170.00
4/13/2005	140.00
4/13/2005	140.00
4/13/2005	140.00
4/13/2005	140.00
4/13/2005	120.00
4/13/2005	120.00
6/7/2005	110.00
6/7/2005	110.00
6/8/2005	98.00
6/8/2005	98.00
6/8/2005	90.00
6/8/2005	96.00
6/8/2005	90.00
6/8/2005	96.00
8/2/2005	170.00
8/2/2005	170.00
8/3/2005	120.00

Percent Exceedance Template

8/3/2005	120.00
8/3/2005	110.00
8/3/2005	110.00
10/4/2005	110.00
10/4/2005	110.00
10/5/2005	120.00
10/5/2005	120.00
10/5/2005	110.00
10/5/2005	94.00
10/5/2005	110.00
10/5/2005	94.00
12/1/2005	130.00
12/1/2005	130.00
12/1/2005	120.00
12/1/2005	120.00
12/1/2005	140.00
12/1/2005	140.00
2/7/2006	63.00
2/7/2006	63.00
2/8/2006	33.00
2/8/2006	33.00
2/8/2006	81.00
2/8/2006	81.00
2/27/2006	110.00
2/27/2006	110.00
2/27/2006	92.00
2/27/2006	92.00
4/4/2006	87.00
4/4/2006	87.00
4/5/2006	89.00
4/5/2006	89.00
4/5/2006	110.00
4/5/2006	38.00
4/5/2006	110.00
4/5/2006	38.00
6/13/2006	110.00
6/13/2006	110.00
6/14/2006	110.00
6/14/2006	110.00
6/14/2006	75.00
6/14/2006	68.00
6/14/2006	75.00
6/14/2006	68.00
8/1/2006	120.00
8/1/2006	120.00
8/3/2006	120.00
8/3/2006	120.00
8/3/2006	99.00
8/3/2006	99.00
10/10/2006	-77.00
10/10/2006	-77.00
10/11/2006	-96.00
10/11/2006	-96.00
10/11/2006	-88.00
10/11/2006	-97.00
10/11/2006	-88.00
10/11/2006	-97.00
11/3/2006	120.00

Percent Exceedance Template

11/3/2006	120.00
11/3/2006	110.00
11/3/2006	110.00
12/9/2006	-50.00
12/9/2006	-50.00
12/9/2006	-35.00
12/9/2006	-35.00
12/9/2006	-100.00
12/9/2006	-100.00
2/7/2007	140.00
2/7/2007	140.00
2/8/2007	120.00
2/8/2007	120.00
2/8/2007	120.00
2/8/2007	120.00
2/8/2007	120.00
2/8/2007	120.00
4/3/2007	110.00
4/3/2007	110.00
4/3/2007	110.00
4/3/2007	110.00
4/3/2007	120.00
4/3/2007	120.00
6/5/2007	130.00
6/5/2007	130.00
6/5/2007	130.00
6/5/2007	130.00
6/5/2007	120.00
6/5/2007	120.00
6/5/2007	110.00
6/5/2007	110.00
8/7/2007	150.00
8/7/2007	150.00
8/8/2007	110.00
8/8/2007	110.00
8/8/2007	98.00
8/8/2007	98.00
10/09/2007	110.00
10/09/2007	110.00
10/10/2007	89.00
10/10/2007	89.00
10/10/2007	89.00
10/10/2007	89.00
12/4/2007	90.00
12/4/2007	90.00
12/5/2007	100.00
12/5/2007	100.00
12/5/2007	100.00
12/5/2007	100.00
12/5/2007	49.00
12/5/2007	100.00
12/5/2007	49.00
12/5/2007	100.00
1/4/2008	160.00
1/4/2008	160.00
2/5/2008	160.00
2/5/2008	160.00
2/6/2008	160.00

Percent Exceedance Template

2/6/2008	160.00
2/6/2008	140.00
2/6/2008	160.00
2/6/2008	160.00
2/6/2008	140.00
4/1/2008	150.00
4/1/2008	150.00
4/2/2008	120.00
4/2/2008	130.00
4/2/2008	120.00
4/2/2008	130.00
6/11/2008	150.00
6/11/2008	150.00
6/12/2008	100.00
6/12/2008	100.00

Percent Exceedance Summary

DATES DATA

Parameter	Mercury, Methyl
Location	Sacramento River
Data Source	CMP
min date	9/3/2002
max date	6/11/2008

9/3/02	0.08
9/4/02	0.07
9/4/02	0.08
10/1/02	0.09
10/2/02	0.08
10/2/02	0.10
11/5/02	0.08
11/6/02	0.06
11/6/02	0.08

Percent Exceedance stats

WQO	0.06
n	147
n detected > WQO	102
% detected > WQO	69.39

12/3/02	-0.03
12/4/02	0.10
12/4/02	0.12
1/7/03	0.14

Other Stats

% detected	78.23
n BDL	32
n DLs	0
max detected	0.39
min detected	0.038
max BDL	<0.118
min BDL	<0.025
n BDL > max detected	0
n BDL > WQO	17
n detected	115
n BDL < WQO	15
max/WQO	6.5000
detected < WQO	45
n < max DL	117

1/8/03	0.11
1/8/03	0.14
2/5/03	0.24
2/5/03	0.25
2/6/03	0.18
2/16/03	0.09
2/16/03	0.10
3/4/03	0.12
3/5/03	0.09
3/5/03	0.08
3/15/03	0.07
3/15/03	0.07
4/1/03	0.09
4/2/03	0.09
4/2/03	0.09
5/6/03	0.12
5/7/03	0.12
5/7/03	0.13
6/10/03	0.10
6/11/03	0.10
6/11/03	0.10
8/5/03	0.08
8/6/03	0.07
8/6/03	0.06
10/15/03	0.05
10/15/03	0.05
10/15/03	0.07
12/11/03	-0.04
12/14/03	0.14
2/17/04	0.16
2/18/04	0.15
2/18/04	-0.03
2/18/04	0.16
2/18/04	0.18

4/13/04	0.07
4/13/04	0.07
4/14/04	0.04
6/8/04	0.10
6/9/04	0.10
6/9/04	0.10
8/10/04	0.05
8/11/04	0.06
8/11/04	0.06
8/11/04	0.05
8/11/04	-0.03
10/5/04	0.09
10/6/04	0.10
10/6/04	0.08
10/6/04	0.08
10/19/04	-0.04
10/20/04	-0.04
12/7/04	0.09
12/8/04	0.09
12/8/04	0.08
1/28/05	0.15
1/28/05	0.17
2/16/05	-0.08
2/16/05	-0.08
2/16/05	-0.03
2/16/05	0.10
4/13/05	-0.07
4/13/05	0.09
4/13/05	-0.07
6/7/05	-0.08
6/8/05	-0.09
6/8/05	-0.06
6/8/05	-0.07
8/2/05	-0.08
8/3/05	0.07
8/3/05	0.06
10/4/05	-0.04
10/5/05	0.07
10/5/05	0.06
10/5/05	0.04
10/5/05	0.04
12/1/05	0.10
12/1/05	0.11
12/1/05	0.12
2/7/06	-0.03
2/8/06	-0.03
2/8/06	-0.03
2/27/06	-0.06
2/27/06	-0.12
4/4/06	0.17
4/5/06	0.11

4/5/06	0.08
4/5/06	0.09
6/13/06	0.13
6/14/06	0.11
6/14/06	0.32
6/14/06	0.32
6/14/06	0.39
8/1/06	0.17
8/3/06	0.09
8/3/06	0.07
10/10/06	-0.07
10/11/06	-0.06
10/11/06	-0.08
10/11/06	0.09
10/11/06	0.09
11/3/06	-0.10
11/3/06	-0.06
12/9/06	0.12
12/9/06	0.10
12/9/06	0.11
2/7/07	0.10
2/8/07	0.19
2/8/07	-0.06
2/8/07	-0.07
4/3/07	0.11
4/3/07	-0.07
4/3/07	-0.08
6/5/07	0.06
6/5/07	0.10
6/5/07	0.17
6/5/07	0.18
8/7/07	0.08
8/8/07	0.10
8/8/07	0.09
10/9/07	0.06
10/10/07	0.09
10/10/07	0.05
12/4/07	0.07
12/5/07	0.08
12/5/07	0.28
12/5/07	0.05
1/4/08	0.08
2/5/08	0.18
2/6/08	0.32
2/6/08	0.31
4/1/08	0.07
4/2/08	0.07
6/11/08	-0.05
6/11/08	0.11

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Indeno(1,2,3-cd)pyrene	10/1/02	-10.00
Location	Sacramento River	10/1/02	0.39
Data Source	CMP	10/2/02	-0.88
		10/2/02	-0.27
		2/5/03	0.41
min date	10/1/2002	2/5/03	1.05
max date	6/12/2008	2/6/03	-0.28
Percent Exceedance stats		2/16/03	-1.00
WQO	4.4	2/16/03	-1.00
n	100	6/10/03	0.46
n detected > WQO	0	6/11/03	-0.35
% detected > WQO	0.00	6/11/03	-0.45
		10/14/03	-1.00
Other Stats		10/15/03	-1.00
% detected	4.00	10/15/03	-1.00
n BDL	96	12/14/03	-2.00
n DLs	9	12/14/03	-2.00
max detected	1.05	2/17/04	-2.00
min detected	0.39	2/18/04	-2.00
max BDL	<10	2/18/04	-2.00
min BDL	<0.27	2/18/04	-2.00
n BDL > max detected	80	4/13/04	-2.00
n BDL > WQO	71	4/13/04	-2.00
n detected	4	6/8/04	-5.00
n BDL < WQO	25	6/9/04	-5.00
max/WQO	0.2386	6/9/04	-5.00
detected < WQO	100	10/5/04	-5.00
n < max DL	100	10/6/04	-5.00
		10/6/04	-5.00
		10/6/04	-5.00
		10/19/04	-5.00
		10/20/04	-5.00
		1/28/05	-5.00
		1/28/05	-5.00
		2/15/05	-5.00
		2/16/05	-5.00
		2/16/05	-5.00
		2/16/05	-5.00
		2/16/05	-5.00
		4/13/05	-5.00
		4/13/05	-5.00
		6/7/05	-5.00
		6/8/05	-5.00
		6/8/05	-5.00
		6/8/05	-5.00
		6/8/05	-5.00
		6/8/05	-5.00
		10/4/05	-5.00
		10/5/05	-5.00
		10/5/05	-5.00
		10/5/05	-5.00

Percent Exceedance Template

10/5/05	-5.00
10/5/05	-5.00
12/1/05	-5.00
12/1/05	-5.00
2/7/06	-5.00
2/8/06	-5.00
2/8/06	-5.00
2/27/06	-5.00
2/27/06	-5.00
6/13/06	-5.00
6/14/06	-5.00
6/14/06	-5.00
6/14/06	-5.00
6/14/06	-5.00
10/10/06	-5.00
10/11/06	-5.00
10/11/06	-5.00
10/11/06	-5.00
10/11/06	-5.00
10/11/06	-5.00
11/3/06	-5.00
11/3/06	-5.00
12/9/06	-5.00
12/9/06	-5.00
2/7/07	-5.00
2/8/07	-5.00
2/8/07	-5.00
2/8/07	-5.00
2/8/07	-5.00
2/8/07	-5.00
4/3/07	-5.00
4/3/07	-5.00
6/5/07	-5.00
6/5/07	-5.00
6/5/07	-5.00
6/5/07	-5.00
6/5/07	-5.00
6/5/07	-5.00
10/9/07	-5.00
10/10/07	-5.00
10/10/07	-5.00
1/4/08	-1.00
2/5/08	-1.00
2/6/08	-1.00
2/6/08	-1.00
6/11/08	-1.00
6/12/08	-1.00

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	4,4'-DDT	12/13/02	-50
Location	UR	12/13/02	-50
Data Source	CMP	2/15/03	-10
min date	12/13/2002	2/15/03	-10
max date	6/6/2007	3/14/03	-50
Percent Exceedance stats		3/14/03	-50
WQO	0.59	3/14/03	-50
n	60	5/14/03	-10
n detected > WQO	8	5/14/03	-10
% detected > WQO	13.33	6/11/03	-10
Other Stats		6/11/03	-10
% detected	13.33	6/11/03	-10
n BDL	52	10/15/03	-10
n DLs	5	10/15/03	-10
max detected	30	10/15/03	-10
min detected	14	12/14/03	30
max BDL	<50	12/14/03	30
min BDL	<5	12/14/03	20
n BDL > max detected	6	2/2/04	20
n BDL > WQO	52	2/2/04	20
n detected	8	2/2/04	-10
n BDL < WQO	0	2/17/04	-10
max/WQO	50.8475	2/17/04	-10
detected < WQO	52	2/17/04	-10
n < max DL	60	4/13/04	-10
		4/13/04	30
		4/13/04	-10
		12/1/05	-10
		12/1/05	-10
		12/1/05	-10
		2/6/06	-10
		2/6/06	-10
		2/8/06	-10
		2/26/06	-20
		2/26/06	-20
		2/26/06	17
		3/5/06	-20
		3/5/06	14
		3/5/06	-20
		6/12/06	-10
		6/12/06	-10
		6/12/06	-10
		11/2/06	-5
		11/2/06	-5
		11/3/06	-5
		12/8/06	-5
		12/9/06	-5
		12/9/06	-10

Percent Exceedance Template

2/9/07	-5
2/9/07	-5
2/9/07	-5
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Chlorpyrifos	12/13/02	4.04
Location	UR	12/13/02	4.34
Data Source	CMP	12/13/02	3.91
min date	12/13/2002	2/15/03	4.37
max date	6/6/2007	2/15/03	3.38
Percent Exceedance stats		2/15/03	3.13
WQO	10	3/14/03	3.28
n	60	3/14/03	4.28
n detected > WQO	3	3/14/03	3.16
% detected > WQO	5.00	5/14/03	6.18
Other Stats		5/14/03	8.01
% detected	100.00	5/14/03	1.62
n BDL	0	6/11/03	5.16
n DLs	0	6/11/03	3.65
max detected	14.1	6/11/03	3.12
min detected	1.01	10/15/03	2.91
max BDL	all detects	10/15/03	3.37
min BDL	all detects	10/15/03	3.09
n BDL > max detected	0	12/14/03	3.3
n BDL > WQO	0	12/14/03	2.83
n detected	60	12/14/03	3.18
n BDL < WQO	0	2/2/04	2.97
max/WQO	1.4100	2/2/04	2.99
detected < WQO	57	2/2/04	3.4
n < max DL	0	2/17/04	1.98
		2/17/04	2.92
		2/17/04	3.14
		4/13/04	5.74
		4/13/04	6.49
		4/13/04	1.57
		12/1/05	7.086451
		12/1/05	5.002714
		12/1/05	4.908569
		2/6/06	8.06
		2/6/06	1.01
		2/8/06	4.23
		2/26/06	5.153514
		2/26/06	4.284563
		2/26/06	6.389367
		3/5/06	3.24229
		3/5/06	4.5424
		3/5/06	3.269269
		6/12/06	4.67
		6/12/06	3.18
		6/12/06	1.96
		11/2/06	9.56
		11/2/06	7.76
		11/3/06	14.1
		12/8/06	10.9
		12/9/06	10.2
		12/9/06	7.29
		2/9/07	8.2
		2/9/07	4.6

Percent Exceedance Template

2/9/07	6.82
4/4/07	6.38
4/4/07	1.72
4/4/07	0.1
6/5/07	5.26
6/5/07	5.67
6/6/07	3.24

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Chrysene	12/13/02	47.7
Location	UR	12/13/02	36.1
Data Source	CMP	12/13/02	59.7
min date	12/13/2002	2/15/03	141
max date	6/6/2007	2/15/03	134
Percent Exceedance stats		2/15/03	118
WQO	44	3/14/03	93.6
n	59	3/14/03	132
n detected > WQO	29	3/14/03	54.3
% detected > WQO	49.15	5/14/03	-2
Other Stats		5/14/03	-2
% detected	66.10	5/14/03	-2
n BDL	20	6/11/03	-2
n DLs	3	6/11/03	-2
max detected	602	10/15/03	-1
min detected	3.099999905	10/15/03	-1
max BDL	<5	10/15/03	-1
min BDL	<1	12/14/03	9
n BDL > max detected	0	12/14/03	73.5
n BDL > WQO	0	2/2/04	81.7
n detected	39	2/2/04	602
n BDL < WQO	20	2/2/04	112
max/WQO	13.6818	2/17/04	49.9
detected < WQO	30	2/17/04	16.2
n < max DL	21	2/17/04	45.5
		4/13/04	-1
		4/13/04	8.6
		4/13/04	5.8
		12/1/05	139
		12/1/05	152
		12/1/05	64.3
		2/6/06	10.1
		2/6/06	3.1
		2/8/06	-1
		2/26/06	68.2
		2/26/06	56
		2/26/06	71.4
		3/5/06	16.6
		3/5/06	88.3
		3/5/06	68.5
		6/12/06	-1
		6/12/06	-1
		6/12/06	-1
		11/2/06	391.4
		11/2/06	325.7
		11/3/06	252.1
		12/8/06	75.2
		12/9/06	210.6
		12/9/06	48.3
		2/9/07	-5
		2/9/07	39.3
		2/9/07	61.1

Percent Exceedance Template

4/4/07	-1
4/4/07	9.3
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Chlorpyrifos	12/13/02	-0.05
Location	UR	12/13/02	-0.05
Data Source	CMP	12/13/02	-0.05
		2/15/03	-0.05
min date	12/13/2002	2/15/03	-0.05
max date	6/6/2007	2/15/03	-0.05
		3/14/03	-0.05
		3/14/03	-0.05
		3/14/03	-0.05
		5/14/03	-0.05
		5/14/03	-0.05
		5/14/03	-0.05
		6/11/03	-0.05
		6/11/03	-0.05
		6/11/03	-0.05
		10/15/03	-0.05
		10/15/03	-0.05
		10/15/03	-0.05
		12/14/03	-0.05
		12/14/03	-0.05
		12/14/03	-0.05
		2/2/04	0.03
		2/2/04	0.04
		2/2/04	-0.05
		2/17/04	-0.01
		2/17/04	-0.01
		2/17/04	-0.01
		2/17/04	-0.01
		2/25/04	-0.05
		3/1/04	-0.05
		3/25/04	-0.05
		4/13/04	-0.012
		4/13/04	-0.012
		4/13/04	-0.012
		4/18/04	-0.05
		1/26/05	45
		1/27/05	110
		2/16/05	-50
		2/20/05	-50
		2/28/05	15
		3/4/05	-50
		3/18/05	35
		3/21/05	33
		4/3/05	-50
		12/1/05	-5
		12/1/05	-5
		12/1/05	-5
		2/6/06	-5
		2/6/06	-5
		2/8/06	-5
		2/26/06	-5
		2/26/06	-5
		2/26/06	-5

Percent Exceedance stats	
WQO	14
n	74
n detected > WQO	5
% detected > WQO	6.76

Other Stats	
% detected	9.46
n BDL	67
n DLs	7
max detected	110
min detected	0.03
max BDL	<50
min BDL	<0.01
n BDL > max detected	0
n BDL > WQO	4
n detected	7
n BDL < WQO	63
max/WQO	7.8571
detected < WQO	69
n < max DL	73

Percent Exceedance Template

3/5/06	-1
3/5/06	-1
3/5/06	-1
6/12/06	-1
6/12/06	-1
6/12/06	-1
11/2/06	-2
11/2/06	-2
11/3/06	-2
12/8/06	-2
12/9/06	-2
12/9/06	-2
2/9/07	-2
2/9/07	-2
2/9/07	-2
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	BHC, gamma (Lindane)	12/13/02	-0.05
Location	UR	12/13/02	-0.05
Data Source	CMP	2/15/03	-0.01
min date	12/13/2002	2/15/03	-0.01
max date	6/6/2007	2/15/03	-0.01
Percent Exceedance stats		3/14/03	-0.05
WQO	19	3/14/03	-0.05
n	60	5/14/03	-0.01
n detected > WQO	0	5/14/03	-0.01
% detected > WQO	0.00	6/11/03	-0.01
Other Stats		6/11/03	-0.01
% detected	0.00	6/11/03	-0.01
n BDL	60	10/15/03	-0.01
n DLs	5	10/15/03	-0.01
max detected	all non-detects	10/15/03	-0.01
min detected	all non-detects	12/14/03	-0.01
max BDL	<0.05	12/14/03	-0.01
min BDL	<0.005	12/14/03	-0.01
n BDL > max detected	0	2/2/04	-0.01
n BDL > WQO	0	2/2/04	-0.01
n detected	0	2/2/04	-0.01
n BDL < WQO	60	2/17/04	-0.01
max/WQO	all non-detects	2/17/04	-0.01
detected < WQO	60	2/17/04	-0.01
n < max DL	60	4/13/04	-0.01
		4/13/04	-0.01
		4/13/04	-0.01
		12/1/05	-0.01
		12/1/05	-0.01
		12/1/05	-0.01
		2/6/06	-0.01
		2/6/06	-0.01
		2/8/06	-0.01
		2/26/06	-0.02
		2/26/06	-0.02
		2/26/06	-0.02
		2/26/06	-0.02
		3/5/06	-0.02
		3/5/06	-0.02
		3/5/06	-0.02
		6/12/06	-0.01
		6/12/06	-0.01
		6/12/06	-0.01
		11/2/06	-0.005
		11/2/06	-0.005
		11/3/06	-0.005
		12/8/06	-0.005
		12/9/06	-0.005
		12/9/06	-0.01
		2/9/07	-0.005
		2/9/07	-0.005

Percent Exceedance Template

2/9/07	-0.005
4/4/07	-0.001
4/4/07	-0.001
4/4/07	-0.001
6/5/07	-0.001
6/6/07	-0.001
6/6/07	-0.001

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(k)fluoranthene	12/13/02	20.4
Location	UR	12/13/02	24.5
Data Source	CMP	12/13/02	21
min date	12/13/2002	2/15/03	92.4
max date	6/6/2007	2/15/03	53.9
Percent Exceedance stats		2/15/03	16.1
WQO	4.4	3/14/03	19.7
n	59	3/14/03	39.8
n detected > WQO	32	3/14/03	-2
% detected > WQO	54.24	5/14/03	-2
Other Stats		5/14/03	-2
% detected	54.24	5/14/03	-2
n BDL	27	6/11/03	-2
n DLs	3	6/11/03	-2
max detected	440	10/15/03	-1
min detected	9.91	10/15/03	-1
max BDL	<5	10/15/03	-1
min BDL	<1	12/14/03	-1
n BDL > max detected	0	12/14/03	59.6
n BDL > WQO	1	2/2/04	42.5
n detected	32	2/2/04	440
n BDL < WQO	26	2/2/04	83.1
max/WQO	100.0000	2/17/04	33.1
detected < WQO	27	2/17/04	9.91
n < max DL	27	2/17/04	24.3
		4/13/04	-1
		4/13/04	-1
		4/13/04	-1
		12/1/05	65.5
		12/1/05	119
		12/1/05	30.8
		2/6/06	-1
		2/6/06	-1
		2/8/06	-1
		2/26/06	43.8
		2/26/06	43.6
		2/26/06	51.7
		3/5/06	10.2
		3/5/06	50.6
		3/5/06	34.5
		6/12/06	-1
		6/12/06	-1
		6/12/06	-1
		11/2/06	211.1
		11/2/06	179.1
		11/3/06	198.4
		12/8/06	49
		12/9/06	163.1
		12/9/06	39
		2/9/07	-5
		2/9/07	20.5
		2/9/07	40.2

Percent Exceedance Template

4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(ghi)perylene	12/13/02	-2
Location	UR	12/13/02	10.4
Data Source	CMP	2/15/03	-2
min date	12/13/2002	2/15/03	-2
max date	6/6/2007	3/14/03	-2
Percent Exceedance stats		3/14/03	-2
WQO	-	3/14/03	-2
n	59	5/14/03	-2
n detected > WQO	1	5/14/03	-2
% detected > WQO	1.69	6/11/03	-2
Other Stats		6/11/03	-2
% detected	44.07	6/11/03	-2
n BDL	33	10/15/03	-1
n DLs	3	10/15/03	-1
max detected	834	10/15/03	-1
min detected	5	12/14/03	5
max BDL	<5	12/14/03	40.7
min BDL	<1	2/2/04	146
n BDL > max detected	0	2/2/04	834
n BDL > WQO	0	2/2/04	167
n detected	26	2/17/04	65.7
n BDL < WQO	33	2/17/04	22.4
max/WQO	#VALUE!	2/17/04	51.8
detected < WQO	0	4/13/04	-1
n < max DL	33	4/13/04	-1
		4/13/04	-1
		12/1/05	109
		12/1/05	157
		12/1/05	58.1
		2/6/06	-1
		2/6/06	-1
		2/8/06	-1
		2/26/06	63.7
		2/26/06	46.8
		2/26/06	50.5
		3/5/06	20.1
		3/5/06	55.6
		3/5/06	52.9
		6/12/06	-1
		6/12/06	-1
		6/12/06	-1
		11/2/06	288.5
		11/2/06	238.6
		11/3/06	323.9
		12/8/06	56.9
		12/9/06	185.4
		12/9/06	28.8
		2/9/07	-5

Percent Exceedance Template

2/9/07	43.2
2/9/07	63.1
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(b)fluoranthene	12/13/02	33.8
Location	UR	12/13/02	31.5
Data Source	CMP	12/13/02	28.8
		2/15/03	79.8
		2/15/03	48.3
min date	12/13/2002	2/15/03	45.7
max date	6/6/2007	3/14/03	27.8
		3/14/03	88.1
Percent Exceedance stats		3/14/03	-2
WQO	4.4	5/14/03	-2
n	59	5/14/03	-2
n detected > WQO	34	5/14/03	-2
% detected > WQO	57.63	6/11/03	-2
		6/11/03	-2
Other Stats		6/11/03	-2
% detected	57.63	10/15/03	-1
n BDL	25	10/15/03	-1
n DLs	3	10/15/03	-1
max detected	622	12/14/03	5.4
min detected	5.4	12/14/03	65.3
max BDL	<5	2/2/04	59.3
min BDL	<1	2/2/04	622
n BDL > max detected	0	2/2/04	101
n BDL > WQO	1	2/17/04	50.9
n detected	34	2/17/04	10.9
n BDL < WQO	24	2/17/04	32.6
max/WQO	141.3636	4/13/04	-1
detected < WQO	25	4/13/04	-1
n < max DL	25	4/13/04	-1
		12/1/05	101
		12/1/05	135
		12/1/05	47.7
		2/6/06	6.5
		2/6/06	-1
		2/8/06	-1
		2/26/06	64.7
		2/26/06	48.5
		2/26/06	57.7
		3/5/06	11.9
		3/5/06	54.8
		3/5/06	47.1
		6/12/06	-1
		6/12/06	-1
		6/12/06	-1
		11/2/06	246
		11/2/06	222.6
		11/3/06	234.4
		12/8/06	62.7
		12/9/06	171.6
		12/9/06	37.9
		2/9/07	-5

Percent Exceedance Template

2/9/07	21.1
2/9/07	51.9
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(a)pyrene	12/13/02	26
Location	UR	12/13/02	21.3
Data Source	CMP	12/13/02	28.6
		2/15/03	63.4
min date	12/13/2002	2/15/03	32
max date	6/6/2007	2/15/03	-2
		3/14/03	26.8
		3/14/03	11.8
Percent Exceedance stats		3/14/03	-2
WQO	4.4	5/14/03	-2
n	59	5/14/03	-2
n detected > WQO	30	5/14/03	-2
% detected > WQO	50.85	6/11/03	-2
		6/11/03	-2
Other Stats		6/11/03	-2
% detected	54.24	10/15/03	-1
n BDL	27	10/15/03	-1
n DLs	3	10/15/03	-1
max detected	642	12/14/03	2.8
min detected	2.8	12/14/03	35.8
max BDL	<5	2/2/04	39
min BDL	<1	2/2/04	642
n BDL > max detected	0	2/2/04	112
n BDL > WQO	1	2/17/04	32.5
n detected	32	2/17/04	-1
n BDL < WQO	26	2/17/04	31.8
max/WQO	145.9091	4/13/04	-1
detected < WQO	29	4/13/04	-1
n < max DL	29	4/13/04	-1
		12/1/05	55.6
		12/1/05	108
		12/1/05	44.8
		2/6/06	4
		2/6/06	-1
		2/8/06	-1
		2/26/06	30.1
		2/26/06	29.6
		2/26/06	40.9
		3/5/06	6.5
		3/5/06	44.5
		3/5/06	44.8
		6/12/06	-1
		6/12/06	-1
		6/12/06	-1
		11/2/06	154.5
		11/2/06	166.2
		11/3/06	166.6
		12/8/06	25.2
		12/9/06	56.6
		12/9/06	32.6
		2/9/07	-5

Percent Exceedance Template

2/9/07	17
2/9/07	26.6
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benz(a)anthracene	12/13/02	12.3
Location	UR	12/13/02	16.9
Data Source	CMP	12/13/02	21.7
		2/15/03	55.2
min date	12/13/2002	2/15/03	40.9
max date	6/6/2007	2/15/03	61.5
		3/14/03	59.1
		3/14/03	54.4
		3/14/03	5.88
Percent Exceedance stats			
WQO	4.4	5/14/03	-2
n	59	5/14/03	-2
n detected > WQO	33	5/14/03	-2
% detected > WQO	55.93	6/11/03	-2
		6/11/03	-2
		6/11/03	-2
Other Stats			
% detected	57.63	10/15/03	-1
n BDL	25	10/15/03	-1
n DLs	3	10/15/03	-1
max detected	587	12/14/03	3.3
min detected	3.3	12/14/03	32.2
max BDL	<5	2/2/04	29.7
min BDL	<1	2/2/04	587
n BDL > max detected	0	2/2/04	45.8
n BDL > WQO	1	2/17/04	25.6
n detected	34	2/17/04	6.05
n BDL < WQO	24	2/17/04	25.9
max/WQO	133.4091	4/13/04	-1
detected < WQO	26	4/13/04	-1
n < max DL	26	4/13/04	-1
		12/1/05	42.9
		12/1/05	72.7
		12/1/05	38.1
		2/6/06	-1
		2/6/06	-1
		2/8/06	-1
		2/26/06	25.2
		2/26/06	21.6
		2/26/06	28.3
		3/5/06	6.5
		3/5/06	39.4
		3/5/06	33.6
		6/12/06	-1
		6/12/06	-1
		6/12/06	-1
		11/2/06	123.5
		11/2/06	187.2
		11/3/06	126.4
		12/8/06	26.1
		12/9/06	93.9
		12/9/06	28.8
		2/9/07	-5

Percent Exceedance Template

2/9/07	16.4
2/9/07	26
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Anthracene	12/13/02	-2
Location	UR	12/13/02	5.7
Data Source	CMP	12/13/02	-2
		2/15/03	8.9
min date	12/13/2002	2/15/03	14.4
max date	6/6/2007	2/15/03	-2
		3/14/03	21.6
		3/14/03	10.5
		3/14/03	2.02
Percent Exceedance stats		5/14/03	-2
WQO	9600	5/14/03	-2
n	59	5/14/03	-2
n detected > WQO	0	5/14/03	-2
% detected > WQO	0.00	6/11/03	-2
		6/11/03	-2
		6/11/03	-2
Other Stats		10/15/03	-1
% detected	50.85	10/15/03	-1
n BDL	29	10/15/03	-1
n DLs	3	10/15/03	-1
max detected	303	12/14/03	2.2
min detected	2.02	12/14/03	10
max BDL	<5	2/2/04	10.4
min BDL	<1	2/2/04	303
n BDL > max detected	0	2/2/04	14.1
n BDL > WQO	0	2/17/04	13.2
n detected	30	2/17/04	-1
n BDL < WQO	29	2/17/04	8.07
max/WQO	0.0316	4/13/04	-1
detected < WQO	59	4/13/04	-1
n < max DL	33	4/13/04	-1
		12/1/05	35.8
		12/1/05	29.7
		12/1/05	54.3
		2/6/06	6.2
		2/6/06	-1
		2/8/06	-1
		2/26/06	6.1
		2/26/06	4.8
		2/26/06	7.4
		3/5/06	3.6
		3/5/06	10.2
		3/5/06	8.1
		6/12/06	-1
		6/12/06	-1
		6/12/06	-1
		11/2/06	39.6
		11/2/06	55.3
		11/3/06	44.3
		12/8/06	-5
		12/9/06	26.7
		12/9/06	14.2
		2/9/07	-5

Percent Exceedance Template

2/9/07	9
2/9/07	8.2
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Aldrin	12/13/02	-50
Location	UR	12/13/02	-50
Data Source	CMP	2/15/03	-10
min date	12/13/2002	2/15/03	-10
max date	6/6/2007	3/14/03	-50
Percent Exceedance stats		3/14/03	4
WQO	0.13	3/14/03	-50
n	60	5/14/03	-10
n detected > WQO	2	5/14/03	-10
% detected > WQO	3.33	6/11/03	-10
Other Stats		6/11/03	-10
% detected	3.33	6/11/03	-10
n BDL	58	10/15/03	-10
n DLs	5	10/15/03	-10
max detected	36	10/15/03	-10
min detected	4	12/14/03	-10
max BDL	<50	12/14/03	-10
min BDL	<5	12/14/03	-10
n BDL > max detected	5	2/2/04	-10
n BDL > WQO	58	2/2/04	-10
n detected	2	2/2/04	-10
n BDL < WQO	0	2/17/04	-5
max/WQO	276.9231	2/17/04	-5
detected < WQO	58	2/17/04	-5
n < max DL	60	4/13/04	-5
		4/13/04	-5
		4/13/04	-5
		12/1/05	-5
		12/1/05	36
		12/1/05	-5
		2/6/06	-5
		2/6/06	-5
		2/8/06	-5
		2/26/06	-20
		2/26/06	-20
		2/26/06	-20
		3/5/06	-20
		3/5/06	-20
		3/5/06	-20
		6/12/06	-5
		6/12/06	-5
		6/12/06	-5
		11/2/06	-5
		11/2/06	-5
		11/3/06	-5
		12/8/06	-5
		12/9/06	-5
		12/9/06	-10

Percent Exceedance Template

2/9/07	-5
2/9/07	-5
2/9/07	-5
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Acenaphthene	12/13/02	-2
Location	UR	12/13/02	-2
Data Source	CMP	2/15/03	-2
min date	12/13/2002	2/15/03	2.4
max date	6/6/2007	2/15/03	40.8
Percent Exceedance stats		3/14/03	57.8
WQO	1200	3/14/03	-2
n	59	3/14/03	-2
n detected > WQO	0	5/14/03	-2
% detected > WQO	0.00	5/14/03	-2
Other Stats		6/11/03	-2
% detected	35.59	6/11/03	-2
n BDL	38	6/11/03	-2
n DLs	3	10/15/03	-1
max detected	295	10/15/03	-1
min detected	1.899999976	10/15/03	-1
max BDL	<5	12/14/03	-1
min BDL	<1	12/14/03	-1
n BDL > max detected	0	2/2/04	-1
n BDL > WQO	0	2/2/04	295
n detected	21	2/2/04	7.4
n BDL < WQO	38	2/17/04	6.25
max/WQO	0.2458	2/17/04	-1
detected < WQO	59	2/17/04	4.02
n < max DL	46	4/13/04	-1
		4/13/04	4.1
		4/13/04	-1
		12/1/05	10.4
		12/1/05	7.5
		12/1/05	4.2
		2/6/06	-1
		2/6/06	-1
		2/8/06	3.3
		2/26/06	-1
		2/26/06	-1
		2/26/06	5.8
		3/5/06	-1
		3/5/06	3.5
		3/5/06	1.9
		6/12/06	-1
		6/12/06	-1
		6/12/06	3.9
		11/2/06	10.2
		11/2/06	16.5
		11/3/06	18
		12/8/06	-5
		12/9/06	12.1
		12/9/06	12.3
		2/9/07	-5

Percent Exceedance Template

2/9/07	-5
2/9/07	-5
4/4/07	-1
4/4/07	-1
4/4/07	-1
6/5/07	-1
6/6/07	-1
6/6/07	-1

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Zinc, Dissolved	12/13/02	42.1
Location	UR	12/13/02	32.2
Data Source	CMP	12/13/02	27.7
		02/15/03	36.9
		02/15/03	19.6
min date	12/13/2002	02/15/03	19.8
max date	6/6/2007	03/14/03	17.2
Percent Exceedance stats		03/14/03	22.9
WQO	100	03/14/03	27.4
n	60	05/14/03	11.4
n detected > WQO	2	05/14/03	133
% detected > WQO	3.33	05/14/03	9.48
Other Stats		06/11/03	5.63
% detected	100.00	06/11/03	21.3
n BDL	0	06/11/03	15.3
n DLs	0	10/15/03	4.81
max detected	133	10/15/03	13.5
min detected	1.33	10/15/03	16
max BDL	all detects	12/14/03	33.6
min BDL	all detects	12/14/03	20
n BDL > max detected	0	12/14/03	16.9
n BDL > WQO	0	02/02/04	18.5
n detected	60	02/02/04	25
n BDL < WQO	0	02/02/04	22.3
max/WQO	1.3300	02/17/04	23.2
detected < WQO	58	02/17/04	18.5
n < max DL	0	02/17/04	16.1
		02/17/04	16.1
		04/13/04	10.4
		04/13/04	67.4
		04/13/04	4.28
		12/01/05	61.46725
		12/01/05	30.54942
		12/01/05	48.91505
		02/06/06	80.6
		02/06/06	2.44
		02/08/06	3.96
		02/26/06	31.99598
		02/26/06	29.26519
		02/26/06	42.85653
		03/05/06	21.84857
		03/05/06	36.98523
		03/05/06	18.67167
		06/12/06	5.13
		06/12/06	24.2
		06/12/06	4.18
		11/02/06	132
		11/02/06	53.8
		11/03/06	47.6
		12/08/06	88
		12/09/06	45.4
		12/09/06	55.2
		02/09/07	61.9
		02/09/07	32.1

Percent Exceedance Template

02/09/07	30.4
04/04/07	10.8
04/04/07	23.8
04/04/07	1.33
06/05/07	4.66
06/05/07	16.7
06/06/07	20.4

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Turbidity	10/15/03	4.8
Location	UR	10/15/03	12
Data Source	CMP	10/15/03	3.2
min date	10/15/2003	12/14/03	33
max date	6/6/2007	12/14/03	96
Percent Exceedance stats		12/14/03	49
WQO	150	02/02/04	100
n	44	02/02/04	100
n detected > WQO	4	02/02/04	110
% detected > WQO	9.09	02/17/04	43
Other Stats		02/17/04	84
% detected	100.00	04/13/04	3.4
n BDL	0	04/13/04	6
n DLs	0	04/13/04	5.2
max detected	260	12/01/05	120
min detected	1.9	12/01/05	46
max BDL	all detects	12/01/05	46
min BDL	all detects	02/06/06	12
n BDL > max detected	0	02/06/06	3.2
n BDL > WQO	0	02/08/06	2.7
n detected	44	02/26/06	28
n BDL < WQO	0	02/26/06	36
max/WQO	1.7333	02/26/06	48
detected < WQO	40	03/05/06	59
n < max DL	0	03/05/06	27
		03/05/06	40
		06/12/06	1.9
		06/12/06	4.7
		06/12/06	7
		11/02/06	210
		11/02/06	210
		11/03/06	260
		12/08/06	55
		12/09/06	150
		12/09/06	52
		02/09/07	45
		02/09/07	27
		02/09/07	35
		04/04/07	2.1
		04/04/07	6.3
		04/04/07	3.4
		06/05/07	3.9
		06/05/07	6
		06/06/07	3.3

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Specific Conductance	2/2/04	67.5
Location	UR	2/2/04	68.5
Data Source	CMP	2/2/04	62.7
min date	2/2/2004	2/17/04	26
max date	6/6/2007	2/17/04	1700
Percent Exceedance stats		2/17/04	69
WQO	240	2/17/04	41
n	46	4/13/04	300
n detected > WQO	16	4/13/04	190
% detected > WQO	34.78	4/13/04	490
Other Stats		4/14/04	415.7
% detected	100.00	4/14/04	160.6
n BDL	0	4/14/04	296
n DLs	0	3/6/05	141.8
max detected	1700	12/1/05	52
min detected	26	12/1/05	69
max BDL	all detects	12/1/05	54
min BDL	all detects	2/6/06	140
n BDL > max detected	0	2/6/06	410
n BDL > WQO	0	2/7/06	461
n detected	46	2/7/06	202
n BDL < WQO	0	2/7/06	285
max/WQO	7.0833	2/7/06	285
detected < WQO	30	2/8/06	130
n < max DL	0	2/8/06	72
		2/26/06	57
		2/26/06	49
		2/26/06	98
		2/27/06	47.6
		2/27/06	58.8
		3/6/06	264
		3/6/06	212
		6/13/06	415
		6/13/06	296
		6/13/06	374
		11/2/06	70
		11/2/06	120
		11/3/06	120
		12/8/06	71
		12/9/06	94
		12/9/06	92
		4/4/07	370
		4/4/07	210
		4/4/07	500
		6/5/07	320
		6/5/07	400
		6/6/07	230

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Solids, Total Dissolved	12/13/02	37
Location	UR	12/13/02	72
Data Source	CMP	12/13/02	45
min date	12/13/2002	02/15/03	33
max date	6/6/2007	02/15/03	58
Percent Exceedance stats		02/15/03	26
WQO	125	03/14/03	29
n	59	03/14/03	29
n detected > WQO	22	05/14/03	240
% detected > WQO	37.29	05/14/03	60
Other Stats		05/14/03	60
% detected	98.31	05/14/03	60
n BDL	1	05/14/03	60
n DLs	1	05/14/03	60
max detected	960	05/14/03	60
min detected	26	05/14/03	60
max BDL	<20	05/14/03	60
min BDL	<20	05/14/03	60
n BDL > max detected	0	05/14/03	60
n BDL > WQO	0	05/14/03	60
n detected	58	05/14/03	60
n BDL < WQO	1	05/14/03	60
max/WQO	7.6800	05/14/03	60
detected < WQO	37	05/14/03	60
n < max DL	1	05/14/03	60
		06/11/03	260
		06/11/03	260
		06/11/03	560
		10/15/03	200
		10/15/03	120
		10/15/03	250
		12/14/03	67
		12/14/03	110
		12/14/03	100
		02/02/04	72
		02/02/04	28
		02/02/04	35
		02/17/04	-20
		02/17/04	30
		02/17/04	53
		04/13/04	170
		04/13/04	150
		04/13/04	320
		12/01/05	74
		12/01/05	81
		12/01/05	71
		02/06/06	48
		02/06/06	190
		02/08/06	120
		02/26/06	61
		02/26/06	58
		02/26/06	44
		03/05/06	87
		03/05/06	69
		03/05/06	58
		06/12/06	260
		06/12/06	260
		06/12/06	350
		11/02/06	92
		11/02/06	130
		11/03/06	160
		12/08/06	39
		12/09/06	92
		12/09/06	82
		02/09/07	40
		02/09/07	120

Percent Exceedance Template

02/09/07	55
04/04/07	260
04/04/07	170
04/04/07	310
06/05/07	300
06/05/07	310
06/06/07	190

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Pyrene	12/13/02	0.0582
Location	UR	12/13/02	0.0397
Data Source	CMP	12/13/02	0.055
min date	12/13/2002	02/15/03	0.169
max date	6/6/2007	02/15/03	0.144
Percent Exceedance stats		02/15/03	0.161
WQO	960	03/14/03	0.168
n	59	03/14/03	0.202
n detected > WQO	0	03/14/03	0.202
% detected > WQO	0.00	03/14/03	0.202
Other Stats		06/11/03	-0.002
% detected	83.05	06/11/03	-0.002
n BDL	10	06/11/03	-0.002
n DLs	3	06/11/03	-0.002
max detected	1.76	10/15/03	-0.001
min detected	0.0022	10/15/03	-0.001
max BDL	<0.005	10/15/03	-0.001
min BDL	<0.001	10/15/03	-0.001
n BDL > max detected	0	12/14/03	0.0129
n BDL > WQO	0	12/14/03	0.0997
n detected	49	12/14/03	0.0997
n BDL < WQO	10	02/02/04	0.122
max/WQO	0.0018	02/02/04	1.76
detected < WQO	59	02/02/04	0.178
n < max DL	18	02/02/04	0.178
		02/17/04	0.117
		02/17/04	0.032
		02/17/04	0.0775
		02/17/04	0.0775
		04/13/04	0.004
		04/13/04	0.0156
		04/13/04	0.01
		12/01/05	0.224
		12/01/05	0.205
		12/01/05	0.095
		02/06/06	0.0234
		02/06/06	0.0058
		02/08/06	0.0027
		02/26/06	0.0893
		02/26/06	0.0731
		02/26/06	0.0985
		03/05/06	0.0235
		03/05/06	0.107
		03/05/06	0.0853
		06/12/06	0.0022
		06/12/06	0.0054
		06/12/06	0.0033
		11/02/06	0.3246
		11/02/06	0.3092
		11/03/06	0.2454
		12/08/06	0.0744
		12/09/06	0.2413
		12/09/06	0.0565
		02/09/07	-0.005
		02/09/07	0.0506

Percent Exceedance Template

02/09/07	0.0744
04/04/07	0.0035
04/04/07	0.0093
04/04/07	0.0045
06/05/07	0.0038
06/06/07	0.0077
06/06/07	0.0033

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Pentachlorophenol	12/13/02	0.583
Location	UR	12/13/02	0.552
Data Source	CMP	12/13/02	0.236
min date	12/13/2002	02/15/03	-0.05
max date	6/6/2007	02/15/03	-0.05
Percent Exceedance stats		02/15/03	-0.05
WQO	0.28	03/14/03	0.194
n	59	03/14/03	0.0865
n detected > WQO	7	03/14/03	0.399
% detected > WQO	11.86	05/14/03	-0.05
Other Stats		05/14/03	-0.05
% detected	50.85	05/14/03	-0.05
n BDL	29	05/14/03	-0.05
n DLs	2	05/14/03	-0.05
max detected	0.583	06/11/03	-0.05
min detected	0.0561	06/11/03	-0.05
max BDL	<0.1	06/11/03	-0.05
min BDL	<0.05	06/11/03	-0.05
n BDL > max detected	0	10/15/03	-0.05
n BDL > WQO	0	10/15/03	-0.05
n detected	30	10/15/03	-0.05
n BDL < WQO	29	10/15/03	-0.05
max/WQO	2.0821	10/15/03	-0.05
detected < WQO	52	12/14/03	0.0678
n < max DL	37	12/14/03	0.232
		02/02/04	-0.05
		02/02/04	0.0561
		02/02/04	-0.05
		02/17/04	-0.05
		02/17/04	-0.05
		02/17/04	-0.05
		04/13/04	-0.05
		04/13/04	-0.05
		04/13/04	-0.05
		12/01/05	0.484
		12/01/05	0.339
		12/01/05	0.26
		02/06/06	0.225
		02/06/06	-0.05
		02/08/06	-0.05
		02/26/06	0.166
		02/26/06	0.148
		02/26/06	0.379
		03/05/06	0.0733
		03/05/06	0.118
		03/05/06	0.0618
		06/12/06	-0.05
		06/12/06	-0.05
		06/12/06	-0.05
		11/02/06	0.155
		11/02/06	0.159
		11/03/06	0.151
		12/08/06	0.313
		12/09/06	0.135
		12/09/06	0.187
		02/09/07	-0.1
		02/09/07	0.128

Percent Exceedance Template

02/09/07	0.14
04/04/07	-0.05
04/04/07	0.081
04/04/07	-0.05
06/05/07	-0.05
06/06/07	0.084
06/06/07	0.051

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Mercury, Total	12/13/02	17.3
Location	UR	12/13/02	22.7
Data Source	CMP	12/13/02	30.8
min date	12/13/2002	02/16/03	10.1
max date	6/5/2007	02/16/03	18.8
Percent Exceedance stats		02/16/03	27.4
WQO	50	03/15/03	15.3
n	62	03/15/03	28.1
n detected > WQO	7	03/15/03	30.1
% detected > WQO	11.29	05/14/03	84
Other Stats		05/14/03	11.8
% detected	100.00	05/14/03	2.07
n BDL	0	06/11/03	3.01
n DLs	0	06/11/03	3.78
max detected	609	06/11/03	2.52
min detected	1.65	10/15/03	5.64
max BDL	all detects	10/15/03	10.89
min BDL	all detects	10/15/03	2.55
n BDL > max detected	0	12/14/03	24.4
n BDL > WQO	0	12/14/03	10.9
n detected	62	12/14/03	17.5
n BDL < WQO	0	02/02/04	18.7
max/WQO	12.1800	02/02/04	24.8
detected < WQO	55	02/02/04	24.1
n < max DL	0	02/17/04	609
		02/17/04	24.3
		02/18/04	12
		04/13/04	3.82
		04/13/04	4.44
		04/13/04	3.92
		12/01/05	54.43889
		12/01/05	19.80466
		12/01/05	47.07194
		02/07/06	1.65
		02/07/06	6.88
		02/08/06	3.87
		02/26/06	17.87042
		02/26/06	22.86792
		02/27/06	16.47651
		02/27/06	20.09181
		02/27/06	14.40062
		03/06/06	13.00593
		03/06/06	13.84752
		03/06/06	34.84812
		06/13/06	2.1
		06/13/06	3.52
		06/13/06	2.88
		11/02/06	66.3
		11/02/06	41.1
		11/02/06	53.4
		12/08/06	70.9
		12/08/06	53.2

Percent Exceedance Template

12/08/06	32.9
02/09/07	26.7
02/09/07	9.68
02/09/07	10.6
04/03/07	4.37
04/03/07	2.7
04/03/07	2.68
06/05/07	3.23
06/05/07	3.02
06/05/07	2.69

Percent Exceedance Summary

DATES DATA

Parameter	Mercury, Methyl
Location	Urban Runoff
Data Source	CMP
min date	9/3/2002
max date	6/11/2008

Percent Exceedance stats

WQO	0.06
n	60
n detected > WQO	59
% detected > WQO	98.33

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	2.04
min detected	0.053
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	60
n BDL < WQO	0
max/WQO	34.0000
detected < WQO	1
n < max DL	0

12/13/02	0.61
12/13/02	0.42
12/13/02	0.878
2/16/03	0.153
2/16/03	0.137
2/16/03	0.619
3/15/03	0.216
3/15/03	0.254
3/15/03	0.355
5/14/03	2.04
5/14/03	0.217
5/14/03	0.097
6/11/03	0.135
6/11/03	0.158
6/11/03	0.088
10/15/03	0.067
10/15/03	0.175
10/15/03	0.111
12/14/03	0.325
12/14/03	0.112
12/14/03	0.199
2/2/04	0.275
2/2/04	0.193
2/2/04	0.395
2/17/04	0.31
2/17/04	0.269
2/18/04	0.114
4/13/04	0.248
4/13/04	0.127
4/13/04	0.147
12/1/05	0.420506
12/1/05	0.231433
12/1/05	0.931932
2/7/06	0.053
2/7/06	0.104
2/8/06	0.108
2/27/06	0.215945
2/27/06	0.236378
2/27/06	0.161959
3/6/06	0.1751
3/6/06	0.165802
3/6/06	0.278532
6/13/06	0.09
6/13/06	0.159
6/13/06	0.094
11/2/06	0.461
11/2/06	0.508

11/2/06	0.671
12/8/06	0.915
12/8/06	0.843
12/8/06	0.593
2/9/07	0.309
2/9/07	0.208
2/9/07	0.206
4/4/07	0.089
4/4/07	0.17
4/4/07	0.07
6/5/07	0.069
6/5/07	0.136
6/5/07	0.067

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Indeno(1,2,3-cd)pyrene	12/13/02	0.0131
Location	UR	12/13/02	-0.002
Data Source	CMP	12/13/02	-0.002
		02/15/03	-0.002
min date	12/13/2002	02/15/03	-0.002
max date	6/6/2007	02/15/03	-0.002
		03/14/03	-0.002
		03/14/03	-0.002
		03/14/03	-0.002
		03/14/03	-0.002
		05/14/03	-0.002
		05/14/03	-0.002
		05/14/03	-0.002
		06/11/03	-0.002
		06/11/03	-0.002
		06/11/03	-0.002
		10/15/03	-0.001
		10/15/03	-0.001
		10/15/03	-0.001
		12/14/03	0.0029
		12/14/03	0.0243
		02/02/04	0.0446
		02/02/04	0.657
		02/02/04	0.114
		02/17/04	0.0421
		02/17/04	-0.001
		02/17/04	0.0295
		04/13/04	-0.001
		04/13/04	-0.001
		04/13/04	-0.001
		12/01/05	0.0644
		12/01/05	0.108
		12/01/05	0.0304
		02/06/06	-0.001
		02/06/06	-0.001
		02/08/06	-0.001
		02/26/06	0.0266
		02/26/06	0.0306
		02/26/06	0.034
		03/05/06	0.0114
		03/05/06	0.0419
		03/05/06	0.0329
		06/12/06	-0.001
		06/12/06	-0.001
		06/12/06	-0.001
		11/02/06	0.1821
		11/02/06	0.1592
		11/03/06	0.2183
		12/08/06	0.035
		12/09/06	0.0225
		12/09/06	-0.005
		02/09/07	-0.005
		02/09/07	0.0175

Percent Exceedance stats	
WQO	0.0044
n	59
n detected > WQO	24
% detected > WQO	40.68

Other Stats	
% detected	42.37
n BDL	34
n DLs	3
max detected	0.657
min detected	0.0029
max BDL	<0.005
min BDL	<0.001
n BDL > max detected	0
n BDL > WQO	2
n detected	25
n BDL < WQO	32
max/WQO	149.3182
detected < WQO	35
n < max DL	35

Percent Exceedance Template

02/09/07	0.0387
04/04/07	-0.001
04/04/07	-0.001
04/04/07	0.0075
06/05/07	-0.001
06/06/07	-0.001
06/06/07	-0.001

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fluorene	12/13/02	0.0092
Location	UR	12/13/02	0.0031
Data Source	CMP	12/13/02	0.0062
min date	12/13/2002	02/15/03	0.0033
max date	6/6/2007	02/15/03	0.0056
Percent Exceedance stats		02/15/03	0.0342
WQO	1300	03/14/03	0.0452
n	59	03/14/03	-0.002
n detected > WQO	0	03/14/03	-0.002
% detected > WQO	0.00	05/14/03	-0.002
Other Stats		05/14/03	-0.002
% detected	49.15	05/14/03	-0.002
n BDL	30	06/11/03	-0.002
n DLs	3	06/11/03	-0.002
max detected	0.291	06/11/03	-0.002
min detected	0.0031	10/15/03	-0.001
max BDL	<0.005	10/15/03	-0.001
min BDL	<0.001	10/15/03	-0.001
n BDL > max detected	0	10/15/03	-0.001
n BDL > WQO	0	12/14/03	0.0031
n detected	29	12/14/03	-0.001
n BDL < WQO	30	12/14/03	-0.001
max/WQO	0.0002	02/02/04	0.0113
detected < WQO	59	02/02/04	0.291
n < max DL	38	02/02/04	-0.001
		02/02/04	-0.001
		02/17/04	0.00786
		02/17/04	-0.001
		02/17/04	0.00651
		04/13/04	-0.001
		04/13/04	-0.001
		04/13/04	-0.001
		12/01/05	0.026
		12/01/05	0.0115
		12/01/05	0.008
		02/06/06	-0.001
		02/06/06	0.0031
		02/08/06	-0.001
		02/26/06	0.0047
		02/26/06	0.0037
		02/26/06	0.013
		03/05/06	0.0046
		03/05/06	0.008
		03/05/06	0.0046
		06/12/06	-0.001
		06/12/06	-0.001
		06/12/06	-0.001
		11/02/06	0.0165
		11/02/06	0.0223
		11/03/06	0.0218
		12/08/06	-0.005
		12/09/06	0.0127
		12/09/06	0.0117
		02/09/07	-0.005
		02/09/07	0.0086

Percent Exceedance Template

02/09/07	0.0084
04/04/07	-0.001
04/04/07	-0.001
04/04/07	-0.001
06/05/07	-0.001
06/06/07	-0.001
06/06/07	-0.001

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fluoranthene	12/13/02	0.0454
Location	UR	12/13/02	0.0349
Data Source	CMP	12/13/02	0.0733
min date	12/13/2002	02/15/03	0.159
max date	6/6/2007	02/15/03	0.118
Percent Exceedance stats		02/15/03	0.183
WQO	300	03/14/03	0.205
n	59	03/14/03	0.221
n detected > WQO	0	03/14/03	0.0676
% detected > WQO	0.00	05/14/03	-0.002
Other Stats		05/14/03	-0.002
% detected	81.36	05/14/03	-0.002
n BDL	11	06/11/03	-0.002
n DLs	3	06/11/03	-0.002
max detected	2.25	06/11/03	-0.002
min detected	0.0019	10/15/03	-0.001
max BDL	<0.005	10/15/03	-0.001
min BDL	<0.001	10/15/03	-0.001
n BDL > max detected	0	10/15/03	-0.001
n BDL > WQO	0	12/14/03	0.0121
n detected	48	12/14/03	0.0979
n BDL < WQO	11	02/02/04	0.0893
max/WQO	0.0075	02/02/04	2.25
detected < WQO	59	02/02/04	0.185
n < max DL	18	02/02/04	0.185
		02/17/04	0.132
		02/17/04	0.0229
		02/17/04	0.0899
		04/13/04	0.0028
		04/13/04	0.0071
		04/13/04	0.0094
		12/01/05	0.145
		12/01/05	0.223
		12/01/05	0.0871
		02/06/06	0.0148
		02/06/06	0.0039
		02/08/06	-0.001
		02/26/06	0.093
		02/26/06	0.0749
		02/26/06	0.0895
		03/05/06	0.0222
		03/05/06	0.0964
		03/05/06	0.0845
		06/12/06	0.0019
		06/12/06	0.0026
		06/12/06	0.0041
		11/02/06	0.3724
		11/02/06	0.3864
		11/03/06	0.3268
		12/08/06	0.0807
		12/09/06	0.3192
		12/09/06	0.0667
		02/09/07	-0.005
		02/09/07	0.0533

Percent Exceedance Template

02/09/07	0.0879
04/04/07	0.0059
04/04/07	0.008
04/04/07	0.0052
06/05/07	0.0042
06/06/07	0.006
06/06/07	0.0033

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fecal Coliform	12/13/02	50000
Location	UR	12/13/02	8000
Data Source	CMP	12/13/02	5000
min date	12/13/2002	02/16/03	22000
max date	6/5/2007	02/16/03	5000
Percent Exceedance stats		02/16/03	50000
WQO	400	03/15/03	70000
n	61	03/15/03	800
n detected > WQO	58	03/15/03	6000
% detected > WQO	95.08	05/14/03	30000
Other Stats		05/14/03	300
% detected	100.00	05/14/03	1700
n BDL	0	06/11/03	5000
n DLs	0	06/11/03	8000
max detected	1700000	06/11/03	7000
min detected	80	10/15/03	5000
max BDL	all detects	10/15/03	1300
min BDL	all detects	10/15/03	80000
n BDL > max detected	0	12/14/03	30000
n BDL > WQO	0	12/14/03	5000
n detected	61	12/14/03	30000
n BDL < WQO	0	02/02/04	1300
max/WQO	4250.0000	02/02/04	30000
detected < WQO	3	02/02/04	14000
n < max DL	0	02/02/04	22000
		02/17/04	5000
		02/17/04	5000
		02/18/04	750
		04/13/04	1100
		04/13/04	5000
		04/13/04	500
		02/15/05	7000
		12/01/05	80000
		12/01/05	13000
		12/01/05	30000
		02/07/06	3000
		02/07/06	80
		02/07/06	1300
		02/27/06	13000
		02/27/06	8000
		02/27/06	14000
		03/06/06	30000
		03/06/06	2300
		03/06/06	17000
		06/13/06	9000
		06/13/06	230
		06/13/06	7000
		11/02/06	3000
		11/02/06	170000
		11/02/06	17000
		12/08/06	1700000
		12/08/06	2200
		12/09/06	80000
		02/09/07	17000

Percent Exceedance Template

02/09/07	7000
02/09/07	17000
04/03/07	1100
04/03/07	3000
04/03/07	5000
06/05/07	5000
06/05/07	11000
06/05/07	17000

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Escherichia Coli	12/13/02	50000
Location	UR	12/13/02	8000
Data Source	CMP	12/13/02	3000
min date	12/13/2002	2/16/03	22000
max date	6/6/2007	2/16/03	3000
Percent Exceedance stats		2/16/03	50000
WQO	235	3/15/03	70000
n	61	3/15/03	800
n detected > WQO	57	3/15/03	6000
% detected > WQO	93.44	5/14/03	30000
Other Stats		5/14/03	300
% detected	100.00	5/14/03	1700
n BDL	0	6/11/03	700
n DLs	0	6/11/03	2300
max detected	1100000	6/11/03	3000
min detected	20	10/15/03	800
max BDL	all detects	10/15/03	800
min BDL	all detects	10/15/03	800
n BDL > max detected	0	10/15/03	17000
n BDL > WQO	0	12/14/03	23000
n detected	61	12/14/03	5000
n BDL < WQO	0	12/14/03	5000
max/WQO	4680.8511	12/14/03	17000
detected < WQO	4	2/2/04	1300
n < max DL	0	2/2/04	17000
		2/2/04	11000
		2/17/04	22000
		2/17/04	5000
		2/18/04	750
		4/13/04	700
		4/13/04	3000
		4/13/04	500
		2/15/05	7000
		12/1/05	7000
		12/1/05	8000
		12/1/05	8000
		2/7/06	3000
		2/7/06	20
		2/7/06	140
		2/27/06	8000
		2/27/06	1700
		2/27/06	14000
		3/6/06	30000
		3/6/06	500
		3/6/06	17000
		6/13/06	7000
		6/13/06	230
		6/13/06	1300
		11/2/06	2300
		11/2/06	50000
		11/2/06	17000
		12/8/06	1100000
		12/8/06	1700
		12/9/06	80000

Percent Exceedance Template

2/9/07	5000
2/9/07	7000
2/9/07	17000
4/3/07	800
4/3/07	1700
4/5/07	190
6/5/07	700
6/5/07	300
6/5/07	17000
6/6/07	

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Endrin	12/13/02	-0.05
Location	UR	12/13/02	-0.05
Data Source	CMP	12/13/02	-0.01
min date	12/13/2002	12/13/02	-0.01
max date	6/6/2007	2/15/03	-0.01
Percent Exceedance stats		2/15/03	-0.05
WQO	0.085	3/14/03	-0.05
n	60	3/14/03	-0.01
n detected > WQO	0	5/14/03	-0.01
% detected > WQO	0.00	5/14/03	-0.01
Other Stats		5/14/03	-0.01
% detected	1.67	6/11/03	-0.01
n BDL	59	6/11/03	-0.01
n DLs	5	10/15/03	-0.01
max detected	0.006	10/15/03	-0.01
min detected	0.006	10/15/03	-0.01
max BDL	<0.05	12/14/03	-0.01
min BDL	<0.005	12/14/03	-0.01
n BDL > max detected	45	12/14/03	-0.01
n BDL > WQO	0	2/2/04	-0.01
n detected	1	2/2/04	-0.01
n BDL < WQO	59	2/2/04	-0.01
max/WQO	0.0706	2/17/04	-0.01
detected < WQO	60	2/17/04	-0.01
n < max DL	60	2/17/04	0.006
		4/13/04	-0.01
		4/13/04	-0.01
		4/13/04	-0.01
		12/1/05	-0.01
		12/1/05	-0.01
		12/1/05	-0.01
		2/6/06	-0.01
		2/6/06	-0.02
		2/8/06	-0.02
		2/26/06	-0.02
		2/26/06	-0.02
		2/26/06	-0.02
		3/5/06	-0.02
		3/5/06	-0.01
		3/5/06	-0.01
		6/12/06	-0.01
		6/12/06	-0.005
		6/12/06	-0.005
		11/2/06	-0.005
		11/2/06	-0.005
		11/3/06	-0.005
		12/8/06	-0.01
		12/9/06	-0.005

Percent Exceedance Template

12/9/06	-0.005
2/9/07	-0.005
2/9/07	-0.001
2/9/07	-0.001
4/4/07	-0.001
4/4/07	-0.001
4/4/07	-0.001
6/5/07	-0.001
6/6/07	
6/6/07	

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Dibenz(a,h)anthracene	12/13/02	-0.002
Location	UR	12/13/02	-0.002
Data Source	CMP	2/15/03	-0.002
min date	12/13/2002	2/15/03	-0.002
max date	6/6/2007	2/15/03	-0.002
Percent Exceedance stats		3/14/03	-0.002
WQO	0.0044	3/14/03	-0.002
n	59	3/14/03	-0.002
n detected > WQO	12	5/14/03	-0.002
% detected > WQO	20.34	5/14/03	-0.002
Other Stats		6/11/03	-0.002
% detected	20.34	6/11/03	-0.002
n BDL	47	6/11/03	-0.002
n DLs	3	10/15/03	-0.001
max detected	0.147	10/15/03	-0.001
min detected	0.0074	10/15/03	-0.001
max BDL	<0.005	12/14/03	-0.001
min BDL	<0.001	12/14/03	-0.001
n BDL > max detected	0	2/2/04	-0.001
n BDL > WQO	4	2/2/04	0.147
n detected	12	2/2/04	0.0222
n BDL < WQO	43	2/17/04	-0.001
max/WQO	33.4091	2/17/04	-0.001
detected < WQO	47	2/17/04	-0.001
n < max DL	47	2/17/04	-0.001
		4/13/04	-0.001
		4/13/04	-0.001
		4/13/04	-0.001
		4/13/04	-0.001
		12/1/05	0.0163
		12/1/05	-0.001
		12/1/05	-0.001
		2/6/06	-0.001
		2/6/06	-0.001
		2/8/06	-0.001
		2/26/06	-0.001
		2/26/06	0.0078
		2/26/06	0.0074
		3/5/06	-0.001
		3/5/06	0.012
		3/5/06	0.0102
		6/12/06	-0.001
		6/12/06	-0.001
		6/12/06	-0.001
		11/2/06	0.0527
		11/2/06	0.0563
		11/3/06	0.0475
		12/8/06	-0.005
		12/9/06	0.0225
		12/9/06	-0.005
		2/9/07	-0.005
		2/9/07	-0.005
		2/9/07	0.0112

Percent Exceedance Template

4/4/07	-0.001
4/4/07	-0.001
4/4/07	-0.001
6/5/07	-0.001
6/6/07	-0.001
6/6/07	-0.001

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Diazinon	12/13/02	0.17
Location	UR	12/13/02	0.2
Data Source	CMP	12/13/02	0.28
		2/15/03	0.31
		2/15/03	0.27
min date	12/13/2002	2/15/03	0.28
max date	6/6/2007	3/14/03	0.16
		3/14/03	0.19
		3/14/03	0.56
Percent Exceedance stats		5/14/03	0.19
WQO	0.05	5/14/03	-0.05
n	74	5/14/03	0.19
n detected > WQO	23	6/11/03	0.05
% detected > WQO	31.08	6/11/03	-0.05
		6/11/03	0.1
Other Stats		10/15/03	-0.05
% detected	47.30	10/15/03	-0.05
n BDL	39	10/15/03	-0.05
n DLs	5	10/15/03	-0.05
max detected	0.56	12/14/03	-0.05
min detected	0.0186	12/14/03	-0.05
max BDL	<0.05	12/14/03	0.16
min BDL	<0.005	2/2/04	0.36
n BDL > max detected	0	2/2/04	0.38
n BDL > WQO	19	2/2/04	0.25
n detected	35	2/17/04	0.03
n BDL < WQO	20	2/17/04	-0.05
max/WQO	11.2000	2/17/04	-0.05
detected < WQO	51	2/17/04	-0.05
n < max DL	51	2/25/04	-0.05
		3/1/04	0.04
		3/25/04	-0.05
		4/13/04	0.2
		4/13/04	-0.018
		4/13/04	0.03
		4/18/04	-0.05
		1/26/05	0.22
		1/27/05	0.23
		2/16/05	0.052
		2/20/05	-0.05
		2/28/05	-0.05
		3/4/05	-0.05
		3/18/05	-0.05
		3/21/05	-0.05
		4/3/05	-0.05
		12/1/05	-0.005
		12/1/05	-0.005
		12/1/05	-0.005
		2/6/06	0.0424
		2/6/06	-0.005
		2/8/06	-0.005
		2/26/06	0.0487
		2/26/06	0.0186
		2/26/06	-0.005

Percent Exceedance Template

3/5/06	0.0083
3/5/06	-0.002
3/5/06	-0.002
6/12/06	0.0244
6/12/06	-0.002
6/12/06	-0.002
11/2/06	0.0338
11/2/06	0.071
11/3/06	0.0408
12/8/06	-0.004
12/9/06	-0.004
12/9/06	-0.004
2/9/07	-0.004
2/9/07	0.038
2/9/07	0.07
4/4/07	0.0356
4/4/07	-0.002
4/4/07	-0.002
6/5/07	-0.002
6/6/07	-0.002
6/6/07	-0.002

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Copper, Total Recoverable	12/13/02	11.1
Location	UR	12/13/02	15.4
Data Source	CMP	12/13/02	8.2
min date	12/13/2002	2/15/03	13.9
max date	6/6/2007	2/15/03	10.3
Percent Exceedance stats		2/15/03	8.68
WQO	1000	3/14/03	7.58
n	60	3/14/03	15
n detected > WQO	0	3/14/03	12.8
% detected > WQO	0.00	5/14/03	8.12
Other Stats		5/14/03	10.7
% detected	100.00	5/14/03	2.5
n BDL	0	6/11/03	6.13
n DLs	0	6/11/03	4.71
max detected	118	6/11/03	4.2
min detected	1.58	10/15/03	3.53
max BDL	all detects	10/15/03	11.6
min BDL	all detects	10/15/03	4.18
n BDL > max detected	0	12/14/03	11.1
n BDL > WQO	0	12/14/03	10.6
n detected	60	12/14/03	9.84
n BDL < WQO	0	2/2/04	21.6
max/WQO	0.1180	2/2/04	16.7
detected < WQO	60	2/2/04	15.6
n < max DL	0	2/17/04	11
		2/17/04	9.72
		2/17/04	13.2
		4/13/04	7.02
		4/13/04	8.55
		4/13/04	2.58
		12/1/05	28.48059
		12/1/05	22.85907
		12/1/05	17.1282
		2/6/06	10.2
		2/6/06	1.58
		2/8/06	4.8
		2/26/06	10.00229
		2/26/06	11.10093
		2/26/06	13.04314
		3/5/06	5.577448
		3/5/06	11.43438
		3/5/06	8.758344
		6/12/06	5.21
		6/12/06	4.46
		6/12/06	2.47
		11/2/06	118
		11/2/06	68.6
		11/3/06	65
		12/8/06	29.7
		12/9/06	44.6
		12/9/06	21.9
		2/9/07	20.6

Percent Exceedance Template

2/9/07	15
2/9/07	13
4/4/07	7.07
4/4/07	4.96
4/4/07	3.2
6/5/07	6.99
6/6/07	3.99
6/6/07	5.81

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	4,4'-DDT	12/14/03	10
Location	Wilson Creek	10/17/04	-10
Data Source	CMP	10/19/04	-10
min date	12/14/2003	12/1/05	-10
max date	2/5/2008	10/5/06	-10
		10/10/07	-1
		2/5/08	-1

Percent Exceedance stats

WQO	0.59
n	7
n detected > WQO	1
% detected > WQO	14.29

Other Stats

% detected	14.29
n BDL	6
n DLs	2
max detected	10
min detected	10
max BDL	<10
min BDL	<1
n BDL > max detected	0
n BDL > WQO	6
n detected	1
n BDL < WQO	0
max/WQO	16.9492
detected < WQO	6
n < max DL	6

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Benzo(a)pyrene
Location	Willow Creek
Data Source	CMP
min date	12/14/2003
max date	10/10/2007

DATES DATA

12/14/03	-1
10/19/04	-1
12/1/05	-1
10/5/06	-1
10/10/07	6.1

Percent Exceedance stats

WQO	4.4
n	5
n detected > WQO	1
% detected > WQO	20.00

Other Stats

% detected	20.00
n BDL	4
n DLs	1
max detected	6.1
min detected	6.1
max BDL	<1
min BDL	<1
n BDL > max detected	0
n BDL > WQO	0
n detected	1
n BDL < WQO	4
max/WQO	1.3864
detected < WQO	4
n < max DL	4

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Benzo(b)fluoranthene
Location	Willow Creek
Data Source	CMP
min date	12/14/2003
max date	10/10/2007

DATES DATA

12/14/03	-1
10/19/04	-1
12/1/05	-1
10/5/06	-1
10/10/07	7.1

Percent Exceedance stats

WQO	4.4
n	5
n detected > WQO	1
% detected > WQO	20.00

Other Stats

% detected	20.00
n BDL	4
n DLs	1
max detected	7.1
min detected	7.1
max BDL	<1
min BDL	<1
n BDL > max detected	0
n BDL > WQO	0
n detected	1
n BDL < WQO	4
max/WQO	1.6136
detected < WQO	4
n < max DL	4

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	BHC, gamma (Lindane)	12/14/03	-0.01
Location	Willow Creek	10/17/04	0.021
Data Source	CMP	10/19/04	-0.01
		12/1/05	-0.01
		10/5/06	-0.01
min date	12/14/2003	10/10/07	-0.001
max date	2/5/2008	2/5/08	-0.001

Percent Exceedance stats

WQO	0.019
n	7
n detected > WQO	1
% detected > WQO	14.29

Other Stats

% detected	14.29
n BDL	6
n DLs	2
max detected	0.021
min detected	0.021
max BDL	<0.01
min BDL	<0.001
n BDL > max detected	0
n BDL > WQO	0
n detected	1
n BDL < WQO	6
max/WQO	1.1053
detected < WQO	6
n < max DL	6

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Copper Dissolved	12/14/03	2.4
Location	Willow Creek	10/17/04	1.32
Data Source	CMP	12/1/05	2.900805
min date	12/14/2003	2/27/06	2.186812
max date	2/25/2008	2/28/06	3.258587
Percent Exceedance stats		3/1/06	2.457907
WQO	10	3/2/06	4.236038
n	20	3/6/06	3.136342
n detected > WQO	0	3/7/06	2.602349
% detected > WQO	0.00	3/8/06	2.163107
Other Stats		3/9/06	1.767565
% detected	100.00	10/5/06	2.53
n BDL	0	11/2/06	3.13
n DLs	0	12/9/06	1.77
max detected	4.236037543	2/9/07	1.88
min detected	0.99	4/3/07	0.99
max BDL	all detects	10/10/07	2.94
min BDL	all detects	1/4/08	1.52
n BDL > max detected	0	2/5/08	1.46
n BDL > WQO	0	2/25/08	1.62
n detected	20		
n BDL < WQO	0		
max/WQO	0.4236		
detected < WQO	20		
n < max DL	0		

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Escherichia Coli
Location	Willow Creek
Data Source	CMP
min date	12/14/2003
max date	2/24/2008

Percent Exceedance stats

WQO	235
n	21
n detected > WQO	16
% detected > WQO	76.19

Other Stats

% detected	95.24
n BDL	1
n DLs	1
max detected	80000
min detected	40
max BDL	<20
min BDL	<20
n BDL > max detected	0
n BDL > WQO	0
n detected	20
n BDL < WQO	1
max/WQO	340.4255
detected < WQO	5
n < max DL	1

DATES DATA

12/14/03	800
2/2/04	500
2/18/04	360
4/13/04	-20
10/6/04	230
10/19/04	30000
1/28/05	17000
2/15/05	1300
12/1/05	2300
2/8/06	500
2/27/06	30000
3/6/06	3000
10/5/06	1700
11/2/06	80000
12/9/06	300
2/9/07	1300
4/3/07	130
10/10/07	5000
1/4/08	1300
2/5/08	40
2/24/08	80

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fecal Coliform	12/14/03	800
Location	Willow Creek	2/2/04	500
Data Source	CMP	2/18/04	1700
min date	12/14/2003	4/13/04	-20
max date	2/24/2008	10/6/04	230
Percent Exceedance stats		10/19/04	30000
WQO	400	1/28/05	1300
n	21	2/15/05	1300
n detected > WQO	14	12/1/05	2300
% detected > WQO	66.67	2/8/06	30
Other Stats		2/27/06	800
% detected	95.24	3/6/06	3000
n BDL	1	10/5/06	1700
n DLs	1	11/2/06	130000
max detected	130000	12/9/06	300
min detected	30	2/9/07	1300
max BDL	<20	4/3/07	130
min BDL	<20	10/10/07	8000
n BDL > max detected	0	1/4/08	1300
n BDL > WQO	0	2/5/08	40
n detected	20	2/24/08	80
n BDL < WQO	1		
max/WQO	325.0000		
detected < WQO	7		
n < max DL	1		

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Mercury, Methyl
Location	Willow Creek
Data Source	CMP
min date	9/3/2002
max date	6/11/2008

DATES	DATA
12/14/03	0.201
10/19/04	0.998
12/1/05	0.587882
10/5/06	0.332
10/10/07	0.342

Percent Exceedance stats

WQO	0.06
n	5
n detected > WQO	5
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	0.998
min detected	0.201
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	16.6333
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Mercury, Total	12/14/03	17.2
Location	Willow Creek	12/1/05	68.22271
Data Source	CMP	10/5/06	15.2
		10/10/07	65.8
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	50
n	4
n detected > WQO	2
% detected > WQO	50.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	68.22271343
min detected	15.2
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	1.3645
detected < WQO	2
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Solids, Total Dissolved	12/14/03	180
Location	Willow Creek	10/19/04	150
Data Source	CMP	12/1/05	120
		10/5/06	240
		10/10/07	150
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	125
n	5
n detected > WQO	4
% detected > WQO	80.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	240
min detected	120
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	1.9200
detected < WQO	1
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Specific Conductance	12/14/03	253
Location	Willow Creek	2/2/04	220
Data Source	CMP	2/2/04	267
		2/18/04	189
		4/13/04	276
min date	12/14/2003	10/6/04	285
max date	2/24/2008	10/17/04	254
		10/17/04	276
Percent Exceedance stats		10/19/04	160
WQO	240	10/19/04	183
n	38	10/19/04	310
n detected > WQO	16	10/21/04	231
% detected > WQO	42.11	10/22/04	246
		1/25/05	256
Other Stats		1/28/05	172
% detected	100.00	1/29/05	209
n BDL	0	1/30/05	235
n DLs	0	2/14/05	281
max detected	310	2/15/05	264
min detected	50	2/16/05	196
max BDL	all detects	2/17/05	238
min BDL	all detects	4/12/05	256
n BDL > max detected	0	12/1/05	160
n BDL > WQO	0	12/1/05	203.7
n detected	38	2/7/06	241
n BDL < WQO	0	2/8/06	250
max/WQO	1.2917	2/27/06	150
detected < WQO	22	3/6/06	50
n < max DL	0	10/5/06	290
		10/5/06	296
		11/2/06	186
		12/9/06	225
		2/9/07	184
		4/3/07	236
		10/10/07	215
		1/4/08	169
		2/5/08	186
		2/24/08	175

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	4,4'-DDT	12/14/03	50
Location	Morrison Creek	10/19/04	-10
Data Source	CMP	12/1/05	-10
		10/5/06	-10
min date	12/14/2003	2/5/08	-1
max date	2/6/2008	2/6/08	-1

Percent Exceedance stats

WQO	0.59
n	6
n detected > WQO	1
% detected > WQO	16.67

Other Stats

% detected	16.67
n BDL	5
n DLs	2
max detected	50
min detected	50
max BDL	<10
min BDL	<1
n BDL > max detected	0
n BDL > WQO	5
n detected	1
n BDL < WQO	0
max/WQO	84.7458
detected < WQO	5
n < max DL	5

Percent Exceedance Template

Percent Exceedance Summary

Parameter Benz(a)anthracene
 Location Morrison Creek
 Data Source CMP

DATES DATA

12/14/03	17.4
10/19/04	0.0398
12/1/05	10.2
10/5/06	-1

min date 12/14/2003
 max date 10/5/2006

Percent Exceedance stats

WQO	4.4
n	4
n detected > WQO	2
% detected > WQO	50.00

Other Stats

% detected	75.00
n BDL	1
n DLs	1
max detected	17.4
min detected	0.039799999
max BDL	<1
min BDL	<1
n BDL > max detected	0
n BDL > WQO	0
n detected	3
n BDL < WQO	1
max/WQO	3.9545
detected < WQO	2
n < max DL	2

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(a)pyrene	12/14/03	54.2
Location	Morrison Creek	10/19/04	47
Data Source	CMP	12/1/05	13.5
		10/5/06	26
min date	12/14/2003		
max date	10/5/2006		

Percent Exceedance stats

WQO	4.4
n	4
n detected > WQO	4
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	54.2
min detected	13.5
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	12.3182
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Benzo(b)fluoranthene
Location	Morrison Creek
Data Source	CMP

DATES DATA

12/14/03	31.7
10/19/04	71
12/1/05	19.9
10/5/06	60.5

min date	12/14/2003
max date	10/5/2006

Percent Exceedance stats

WQO	4.4
n	4
n detected > WQO	4
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	71
min detected	19.89999962
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	16.1364
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Benzo(k)fluoranthene	12/14/03	24.4
Location	Morrison Creek	10/19/04	53.9
Data Source	CMP	12/1/05	13.1
		10/5/06	29.6
min date	12/14/2003		
max date	10/5/2006		

Percent Exceedance stats

WQO	4.4
n	4
n detected > WQO	4
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	53.90000153
min detected	13.10000038
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	12.2500
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Chrysene	12/14/03	32.2
Location	Morrison Creek	10/19/04	108
Data Source	CMP	12/1/05	23.6
		10/5/06	42.4
min date	12/14/2003		
max date	10/5/2006		

Percent Exceedance stats

WQO	44
n	4
n detected > WQO	1
% detected > WQO	25.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	108
min detected	23.60000038
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	2.4545
detected < WQO	3
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Copper Dissolved	12/14/03	4.12
Location	Morrison Creek	12/1/05	3.918517
Data Source	CMP	2/27/06	4.471416
min date	12/14/2003	2/28/06	3.86061
max date	2/25/2008	3/1/06	2.775878
Percent Exceedance stats		3/2/06	3.89557
WQO	10	3/6/06	3.116557
n	17	3/7/06	3.72143
n detected > WQO	1	3/8/06	2.917976
% detected > WQO	5.88	3/9/06	2.705378
Other Stats		10/5/06	18.7
% detected	100.00	11/2/06	7.83
n BDL	0	12/9/06	5.72
n DLs	0	2/9/07	5.59
max detected	18.7	4/3/07	2.12
min detected	2.12	2/5/08	2.42
max BDL	all detects	2/25/08	3.89
min BDL	all detects		
n BDL > max detected	0		
n BDL > WQO	0		
n detected	17		
n BDL < WQO	0		
max/WQO	1.8700		
detected < WQO	16		
n < max DL	0		

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Diazinon	12/14/03	0.2
Location	Morrison Creek	2/2/04	-0.05
Data Source	CMP	2/2/04	0.32
		2/18/04	-0.05
min date	12/14/2003	2/18/04	0.2
max date	2/24/2008	4/13/04	-0.018
		4/13/04	-0.018
Percent Exceedance stats		10/6/04	-0.05
WQO	0.05	10/17/04	-0.05
n	42	10/19/04	-0.05
n detected > WQO	5	10/21/04	-0.05
% detected > WQO	11.90	10/22/04	-0.05
		1/25/05	-0.05
		1/28/05	-0.05
Other Stats		1/28/05	0.25
% detected	14.29	1/29/05	-0.05
n BDL	36	1/30/05	-0.05
n DLs	5	2/14/05	-0.05
max detected	0.37	2/15/05	-0.05
min detected	0.0478	2/15/05	0.37
max BDL	<0.05	2/16/05	-0.05
min BDL	<0.002	2/17/05	-0.05
n BDL > max detected	0	4/12/05	-0.05
n BDL > WQO	17	4/12/05	-0.05
n detected	6	12/1/05	-0.005
n BDL < WQO	19	2/7/06	-0.018
max/WQO	7.4000	2/7/06	-0.018
detected < WQO	37	2/27/06	-0.00353
n < max DL	37	2/27/06	-0.018
		3/6/06	-0.00353
		3/6/06	-0.00353
		10/5/06	-0.002
		11/2/06	-0.002
		12/9/06	-0.002
		12/9/06	-0.002
		2/9/07	0.0478
		2/9/07	-0.002
		4/3/07	-0.002
		4/3/07	-0.002
		1/4/08	-0.002
		2/24/08	-0.002
		2/24/08	-0.002

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Escherichia Coli	12/14/03	5000
Location	Morrison Creek	2/2/04	5000
Data Source	CMP	2/18/04	5000
min date	12/14/2003	4/13/04	230
max date	2/24/2008	10/6/04	170
Percent Exceedance stats		10/19/04	17000
WQO	235	1/28/05	8000
n	19	2/15/05	50000
n detected > WQO	15	12/1/05	13000
% detected > WQO	78.95	2/8/06	80000
Other Stats		2/27/06	500000
% detected	94.74	3/6/06	13000
n BDL	1	10/5/06	22000
n DLs	1	11/2/06	30000
max detected	500000	12/9/06	23000
min detected	50	2/9/07	17000
max BDL	<20	4/3/07	50
min BDL	<20	2/5/08	-20
n BDL > max detected	0	2/24/08	13000
n BDL > WQO	0		
n detected	18		
n BDL < WQO	1		
max/WQO	2127.6596		
detected < WQO	4		
n < max DL	1		

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fecal Coliform	12/14/03	8000
Location	Morrison Creek	2/2/04	8000
Data Source	CMP	2/18/04	7000
		4/13/04	300
		10/6/04	500
min date	12/14/2003	10/19/04	80000
max date	2/24/2008	1/28/05	13000
		2/15/05	130000
Percent Exceedance stats		12/1/05	23000
WQO	400	2/8/06	170
n	19	2/27/06	22000
n detected > WQO	15	3/6/06	13000
% detected > WQO	78.95	10/5/06	80000
		11/2/06	50000
Other Stats		12/9/06	3000
% detected	100.00	2/9/07	17000
n BDL	0	4/3/07	80
n DLs	0	2/5/08	40
max detected	130000	2/24/08	13000
min detected	40		
max BDL	all detects		
min BDL	all detects		
n BDL > max detected	0		
n BDL > WQO	0		
n detected	19		
n BDL < WQO	0		
max/WQO	325.0000		
detected < WQO	4		
n < max DL	0		

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Indeno(1,2,3-cd)pyrene	12/14/03	-0.001
Location	Morrison Creek	10/19/04	0.0366
Data Source	CMP	12/1/05	0.009
		10/5/06	-0.001
min date	12/14/2003		
max date	10/5/2006		

Percent Exceedance stats

WQO	0.0044
n	4
n detected > WQO	2
% detected > WQO	50.00

Other Stats

% detected	50.00
n BDL	2
n DLs	1
max detected	0.036599998
min detected	0.009
max BDL	<0.001
min BDL	<0.001
n BDL > max detected	0
n BDL > WQO	0
n detected	2
n BDL < WQO	2
max/WQO	8.3182
detected < WQO	2
n < max DL	2

Percent Exceedance Template

Percent Exceedance Summary

		DATES	DATA
Parameter	Mercury, Methyl	12/14/03	0.394
Location	Morrison Creek	10/19/04	0.53
Data Source	CMP	12/1/05	0.4608
		10/5/06	0.515
min date	9/3/2002		
max date	6/11/2008		

Percent Exceedance stats

WQO	0.06
n	4
n detected > WQO	4
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	0.53
min detected	0.394
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	8.8333
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Pentachlorophenol	12/14/03	0.306
Location	Morrison Creek	10/19/04	0.748
Data Source	CMP	12/1/05	0.404
		10/5/06	0.13
min date	12/14/2003		
max date	10/5/2006		

Percent Exceedance stats

WQO	0.28
n	4
n detected > WQO	3
% detected > WQO	75.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	0.748
min detected	0.13
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	2.6714
detected < WQO	1
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Solids, Total Dissolved	12/14/03	79
Location	Morrison Creek	10/19/04	130
Data Source	CMP	12/1/05	73
		10/5/06	440
min date	12/14/2003		
max date	10/5/2006		

Percent Exceedance stats

WQO	125
n	4
n detected > WQO	2
% detected > WQO	50.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	440
min detected	73
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	3.5200
detected < WQO	2
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Specific Conductance	12/14/03	87
Location	Morrison Creek	2/2/04	83.6
Data Source	CMP	2/2/04	101
min date	12/14/2003	2/2/04	81
max date	2/25/2008	2/18/04	69.4
Percent Exceedance stats		2/18/04	64.2
WQO	240	4/13/04	192
n	47	4/13/04	316
n detected > WQO	9	10/6/04	360
% detected > WQO	19.15	10/17/04	360
Other Stats		10/19/04	100
% detected	100.00	10/21/04	158
n BDL	0	10/22/04	182
n DLs	0	1/25/05	265
max detected	360	1/28/05	68
min detected	7	1/28/05	144
max BDL	all detects	1/29/05	108
min BDL	all detects	1/30/05	135
n BDL > max detected	0	2/14/05	289
n BDL > WQO	0	2/15/05	89
n detected	47	2/15/05	249
n BDL < WQO	0	2/16/05	128.6
max/WQO	1.5000	2/17/05	141
detected < WQO	38	4/12/05	87
n < max DL	0	4/12/05	248
		12/1/05	88
		12/1/05	100.1
		2/7/06	125
		2/7/06	187
		2/8/06	202
		2/27/06	66
		2/27/06	65
		3/6/06	91
		3/6/06	63
		10/5/06	253
		10/5/06	260
		11/2/06	137
		12/9/06	103
		12/9/06	164
		2/9/07	69
		4/3/07	140
		4/3/07	7
		4/3/07	169
		2/5/08	86
		2/5/08	97
		2/25/08	85
		2/25/08	74

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	4,4'-DDT	12/14/03	10
Location	Arcade Creek	10/19/04	-10
Data Source	CMP	12/1/05	-10.00
min date	12/14/2003	10/5/06	-10
max date	2/5/2008	10/10/07	-1
		2/5/08	-1

Percent Exceedance stats

WQO	0.59
n	6
n detected > WQO	1
% detected > WQO	16.67

Other Stats

% detected	16.67
n BDL	5
n DLs	2
max detected	10
min detected	10
max BDL	<10
min BDL	<1
n BDL > max detected	0
n BDL > WQO	5
n detected	1
n BDL < WQO	0
max/WQO	16.9492
detected < WQO	5
n < max DL	5

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Benz(a)anthracene
Location	Arcade Creek
Data Source	CMP
min date	12/14/2003
max date	10/10/2007

DATES	DATA
12/14/03	48.4
10/19/04	0.0274
12/1/05	6
10/5/06	51.4
10/10/07	31.6

Percent Exceedance stats

WQO	4.4
n	5
n detected > WQO	4
% detected > WQO	80.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	51.4
min detected	0.0274
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	11.6818
detected < WQO	1
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Benzo(a)pyrene
Location	Arcade Creek
Data Source	CMP
min date	12/14/2003
max date	10/10/2007

DATES DATA

12/14/03	57.2
10/19/04	28.2
12/1/05	10.2
10/5/06	60.4
10/10/07	71.6

Percent Exceedance stats

WQO	4.4
n	5
n detected > WQO	5
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	71.6
min detected	10.19999981
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	16.2727
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Benzo(b)fluoranthene
Location	Arcade Creek
Data Source	CMP
min date	12/14/2003
max date	10/10/2007

DATES	DATA
12/14/03	67.2
10/19/04	44.1
12/1/05	13.5
10/5/06	102
10/10/07	120.5

Percent Exceedance stats

WQO	4.4
n	5
n detected > WQO	5
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	120.5
min detected	13.5
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	27.3864
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary

Parameter	Benzo(k)fluoranthene
Location	Arcade Creek
Data Source	CMP
min date	12/14/2003
max date	10/10/2007

DATES DATA

12/14/03	63.6
10/19/04	47.2
12/1/05	12.2
10/5/06	80.9
10/10/07	37.1

Percent Exceedance stats

WQO	4.4
n	5
n detected > WQO	5
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	80.9
min detected	12.19999981
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	18.3864
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Chrysene	12/14/03	67.7
Location	Arcade Creek	10/19/04	70
Data Source	CMP	12/1/05	18.2
		10/5/06	113
		10/10/07	88.8
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	44
n	5
n detected > WQO	4
% detected > WQO	80.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	113
min detected	18.20000076
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	2.5682
detected < WQO	1
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Copper Dissolved	12/14/03	3.32
Location	Arcade Creek	2/2/04	3.09
Data Source	CMP	2/18/04	3.02
		4/13/04	3.98
min date	12/14/2003	1/28/05	3.42
max date	2/25/2008	2/15/05	5.59
Percent Exceedance stats		12/1/05	4.215065
WQO	10	2/7/06	3.75
n	25	2/27/06	4.044624
n detected > WQO	1	2/28/06	5.734711
% detected > WQO	4.00	3/1/06	5.317255
		3/2/06	2.421268
		3/6/06	3.346605
		3/7/06	4.977886
		3/8/06	5.183052
Other Stats		3/9/06	5.099114
% detected	100.00	10/5/06	15.2
n BDL	0	11/2/06	8.18
n DLs	0	12/9/06	7.83
max detected	15.2	2/9/07	6.48
min detected	2.4212677	4/3/07	4.1
max BDL	all detects	10/10/07	6.91
min BDL	all detects	1/4/08	4.04
n BDL > max detected	0	2/5/08	5.51
n BDL > WQO	0	2/25/08	4.89
n detected	25		
n BDL < WQO	0		
max/WQO	1.5200		
detected < WQO	24		
n < max DL	0		

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Diazinon	12/14/03	0.5
Location	Arcade Creek	2/2/04	0.28
Data Source	CMP	2/18/04	0.24
		4/13/04	0.16
		10/6/04	-0.05
min date	12/14/2003	10/17/04	-0.05
max date	2/24/2008	10/19/04	-0.05
		10/21/04	-0.05
Percent Exceedance stats		10/22/04	-0.05
WQO	0.05	1/25/05	-0.05
n	30	1/28/05	0.2
n detected > WQO	8	1/29/05	0.26
% detected > WQO	26.67	1/30/05	0.21
		2/14/05	-0.05
Other Stats		2/15/05	-0.05
% detected	36.67	2/16/05	-0.05
n BDL	19	2/17/05	-0.05
n DLs	4	4/12/05	-0.05
max detected	6.5	12/1/05	0.0256
min detected	0.0132	2/7/06	-0.018
max BDL	<0.05	2/27/06	-0.00353
min BDL	<0.002	3/6/06	-0.00353
n BDL > max detected	0	10/5/06	-0.002
n BDL > WQO	11	11/2/06	-0.002
n detected	11	12/9/06	-0.002
n BDL < WQO	8	2/9/07	0.0347
max/WQO	130.0000	4/3/07	6.5
detected < WQO	22	10/10/07	0.0132
n < max DL	22	1/4/08	-0.002
		2/24/08	-0.002

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Dibenz(a,h)anthracene	12/14/03	-0.001
Location	Arcade Creek	10/19/04	-0.001
Data Source	CMP	12/1/05	-0.001
		10/5/06	0.0239
		10/10/07	0.0184
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	0.0044
n	5
n detected > WQO	2
% detected > WQO	40.00

Other Stats

% detected	40.00
n BDL	3
n DLs	1
max detected	0.0239
min detected	0.0184
max BDL	<0.001
min BDL	<0.001
n BDL > max detected	0
n BDL > WQO	0
n detected	2
n BDL < WQO	3
max/WQO	5.4318
detected < WQO	3
n < max DL	3

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Escherichia Coli	12/13/02	50000
Location	Arcade Creek	12/13/02	8000
Data Source	CMP	12/13/02	3000
		12/14/03	9000
min date	12/14/2003	2/2/04	17000
max date	2/24/2008	2/18/04	30000
		4/13/04	500
		10/6/04	300
		10/19/04	80000
Percent Exceedance stats		1/28/05	7000
WQO	235	2/15/05	17000
n	24	12/1/05	5000
n detected > WQO	22	2/8/06	170
% detected > WQO	91.67	2/27/06	5000
		3/6/06	23000
Other Stats		10/5/06	30000
% detected	100.00	11/2/06	23000
n BDL	0	12/9/06	50000
n DLs	0	2/9/07	8000
max detected	80000	4/3/07	220
min detected	0.0132	10/10/07	50000
max BDL	all detects	1/4/08	11000
min BDL	all detects	2/5/08	300
n BDL > max detected	0	2/24/08	3000
n BDL > WQO	0		
n detected	24		
n BDL < WQO	0		
max/WQO	340.4255		
detected < WQO	2		
n < max DL	0		

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Fecal Coliform	12/14/03	9000
Location	Arcade Creek	2/2/04	17000
Data Source	CMP	2/18/04	30000
min date	12/14/2003	4/13/04	500
max date	2/24/2008	10/6/04	500
Percent Exceedance stats		10/19/04	130000
WQO	400	1/28/05	11000
n	21	2/15/05	17000
n detected > WQO	18	12/1/05	23000
% detected > WQO	85.71	2/8/06	170
Other Stats		2/27/06	11000
% detected	100.00	3/6/06	23000
n BDL	0	10/5/06	30000
n DLs	0	11/2/06	23000
max detected	130000	12/9/06	130000
min detected	170	2/9/07	8000
max BDL	all detects	4/3/07	220
min BDL	all detects	10/10/07	50000
n BDL > max detected	0	1/4/08	11000
n BDL > WQO	0	2/5/08	300
n detected	21	2/24/08	3000
n BDL < WQO	0		
max/WQO	325.0000		
detected < WQO	3		
n < max DL	0		

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Indeno(1,2,3-cd)pyrene	12/14/03	0.0308
Location	Arcade Creek	10/19/04	-0.001
Data Source	CMP	12/1/05	0.0109
		10/5/06	0.0662
		10/10/07	0.1216
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	0.0044
n	5
n detected > WQO	4
% detected > WQO	80.00

Other Stats

% detected	80.00
n BDL	1
n DLs	1
max detected	0.1216
min detected	0.0109
max BDL	<0.001
min BDL	<0.001
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	1
max/WQO	27.6364
detected < WQO	1
n < max DL	1

Percent Exceedance Template

Percent Exceedance Summary

		DATES	DATA
Parameter	Mercury, Methyl	12/14/03	0.348
Location	Arcade Creek	10/19/04	0.854
Data Source	CMP	12/1/05	0.823448
		10/5/06	1.4
		10/10/07	0.548
min date	9/3/2002		
max date	6/11/2008		

Percent Exceedance stats

WQO	0.06
n	5
n detected > WQO	5
% detected > WQO	100.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	1.4
min detected	0.348
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	23.3333
detected < WQO	0
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Mercury, Total	12/14/03	30.5
Location	Arcade Creek	12/1/05	43.66433
Data Source	CMP	10/5/06	58.1
		10/10/07	101
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	50
n	4
n detected > WQO	2
% detected > WQO	50.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	101
min detected	30.5
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	4
n BDL < WQO	0
max/WQO	2.0200
detected < WQO	2
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Pentachlorophenol	12/14/03	0.108
Location	Arcade Creek	10/19/04	0.295
Data Source	CMP	12/1/05	0.192
		10/5/06	0.076
		10/10/07	0.104
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	0.28
n	5
n detected > WQO	1
% detected > WQO	20.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	0.295
min detected	0.076
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	1.0536
detected < WQO	4
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Specific Conductance	12/14/03	60
Location	Arcade Creek	2/2/04	80
Data Source	CMP	2/18/04	60.4
min date	12/14/2003	4/13/04	307
max date	2/24/2008	10/6/04	285
Percent Exceedance stats		10/17/04	281
WQO	240	10/19/04	79
n	36	10/19/04	128
n detected > WQO	7	10/21/04	158
% detected > WQO	19.44	10/22/04	197
Other Stats		1/25/05	391
% detected	100.00	1/25/05	391
n BDL	0	1/28/05	112
n DLs	0	1/29/05	132
max detected	391	1/30/05	151
min detected	37	2/14/05	327
max BDL	all detects	2/15/05	194
min BDL	all detects	2/16/05	93.1
n BDL > max detected	0	2/17/05	122
n BDL > WQO	0	4/12/05	148
n detected	36	12/1/05	69
n BDL < WQO	0	12/1/05	76
max/WQO	1.6292	2/7/06	205
detected < WQO	29	2/8/06	200
n < max DL	0	2/27/06	42
		3/6/06	50
		10/5/06	227
		10/5/06	230
		11/2/06	130
		12/9/06	77
		2/9/07	84
		4/3/07	266
		10/10/07	146
		1/4/08	37
		2/5/08	181
		2/24/08	97

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Turbidity	12/14/03	220
Location	Arcade Creek	10/19/04	280
Data Source	CMP	12/1/05	120
		10/5/06	250
		10/10/07	320
min date	12/14/2003		
max date	10/10/2007		

Percent Exceedance stats

WQO	150
n	5
n detected > WQO	4
% detected > WQO	80.00

Other Stats

% detected	100.00
n BDL	0
n DLs	0
max detected	320
min detected	120
max BDL	all detects
min BDL	all detects
n BDL > max detected	0
n BDL > WQO	0
n detected	5
n BDL < WQO	0
max/WQO	2.1333
detected < WQO	1
n < max DL	0

Percent Exceedance Template

Percent Exceedance Summary		DATES	DATA
Parameter	Zinc, Dissolved	12/14/03	10.8
Location	Arcade Creek	12/1/05	12.31509
Data Source	CMP	2/27/06	11.61096
		2/28/06	14.15106
		3/1/06	13.68639
min date	12/14/2003	3/2/06	3.326639
max date	2/25/2008	3/6/06	9.781774
		3/7/06	18.40552
		3/8/06	14.44334
Percent Exceedance stats		3/9/06	13.7891
WQO	100	10/5/06	111
n	19	11/2/06	39.5
n detected > WQO	1	12/9/06	37.7
% detected > WQO	5.26	2/9/07	20.9
		4/3/07	9.71
Other Stats		10/10/07	26.7
% detected	100.00	1/4/08	12
n BDL	0	2/5/08	15.8
n DLs	0	2/25/08	17.5
max detected	111		
min detected	3.326639084		
max BDL	all detects		
min BDL	all detects		
n BDL > max detected	0		
n BDL > WQO	0		
n detected	19		
n BDL < WQO	0		
max/WQO	1.1100		
detected < WQO	18		
n < max DL	0		

Attachment C. Local water bodies on 2006 Section 303(d) list relevant to Sacramento Stormwater Management Program

Water Body	Bis(2ethylhexyl) phthalate	Chlordane	Chlorpyrifos	Copper	DDT	Diazinon	Dieldrin	E.C.	Group A Pesticides ²	Malathion	Mercury	Org. Enrich./ Low D.O.	PCBs	PCP	Pyrethroids	Zinc	Unknown Toxicity
Delta Waterways	0	0	1 (high) ¹	0	1	1 (high)	0	1 (medium)	1 (low)	0	1 (high)	1 (high)	1 (low)	0	0	0	1 (medium)
Arcade Creek	1	0	1 (medium)	1 (low)	0	1 (medium)	0	0	0	1	0	0	0	0	1	0	0
American River, Lower	0	0	0	0	0	0	1	0	0	0	1 (medium)	0	1	0	0	0	1 (low)
Chicken/Strong Ranch Slough	0	0	1 (medium)	0	0	1 (medium)	0	0	0	0	0	0	0	0	1	0	0
Elder Creek	0	0	1 (medium)	0	0	1 (medium)	0	0	0	0	0	0	0	0	1	0	0
Elk Grove Creek	0	0	1	0	0	1 (medium)	0	0	0	0	0	0	0	0	0	0	0
Mokelumne River, Lower	0	0	1	1 (low)	0	0	0	0	0	0	1	1	0	0	0	1 (low)	0
Morrison Creek	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0
Natomas East Main Drain	0	0	0	0	0	1 (medium)	0	0	0	0	1	0	1 (low)	0	0	0	0
Sac. River (Red Bluff - Delta)	0	1	0	0	1	0	1	0	0	0	1 (high)	0	1	0	0	0	1 (medium)
Strong Ranch Slough	0	0	1 (medium)	0	0	1 (medium)	0	0	0	0	0	0	0	0	1	0	0
Total 303(d) Listings in Area	2	1	8	2	2	8	2	1	1	1	5	2	4	1	5	1	3

1. Text in parentheses beneath pollutant count is SWRCB Section 303(d) list TMDL priority schedule: low, medium, high.

2. Group A Pesticides include the following constituents: aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, hexachlorocyclohexane (including Lindane), endosulfan, and toxaphene.

3. Titles in red are updated for 2008 303(d) draft list.

Data Source: United States Environmental Protection Agency (EPA). 1998. Total Maximum Daily Load (TMDL) Program: California List of Impaired Waters for 1998.

Attachment D. Summary of Local Toxicity Identification Evaluation Data

The Permittees collected four toxicity samples at five receiving water locations during the 2003-04 monitoring period. Significant toxicity was not found in any of these samples, and toxicity identification studies were not performed. However, recent work by others in the Sacramento area¹² has determined that pyrethroids in the sediments cause toxicity to benthic organisms. Unpublished data collection by the Regional Board has also indicated that there are periods when receiving water aquatic toxicity occurs due to pyrethroids. Based on these data collected by others, and the expected connection between pesticide application and urban runoff, this class of pesticide was determined to be an identified source of aquatic toxicity in both urban runoff and receiving waters.

¹ D.P. Weston, R.W. Holmes, J. You, and M.J. Lydy, "Aquatic Toxicity Due to Residential Use of Pyrethroid Insecticides," *Environmental Science & Technology*, Vol. 39, No. 24, 2004, pp 9778-9784.

² D.P. Weston, J. You, and M.J. Lydy, "Distribution and Toxicity of Sediment-Associated Pesticides in Agriculture-Dominated Water Bodies of California's Central Valley", *Environmental Science & Technology*, Vol. 38, No. 10, 2004, pp 2753-2759.

TITLE 6 HEALTH AND SANITATION

Chapter 6.99 ENVIRONMENTAL MANAGEMENT DEPARTMENT REGULATORY FEES

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6.99.000 Title.

This Chapter shall be known as the Environmental Management Department Regulatory Fees Ordinance. (SCC 1223 § 2 (part), 2002.)

6.99.001 Purpose.

The provisions of this Chapter establishing fees associated with Hazardous Materials and Waste Regulation are enacted pursuant to the provisions of Health and Safety Code, Sections 101325 and 101280; Division 20, Chapter 6.5 (commencing with Section 25100), Chapter 6.7 (commencing with Section 25280), Chapter 6.95 (commencing with Section 25500) and Chapter 6.11 (commencing with Section 25404); California Water Code (commencing with Section 13700), and California Constitution, Article XI, Section 7. The provisions of this Chapter establishing fees associated with Environmental Health Services are enacted pursuant to the provisions of the California Health and Safety Code, Section 101325, and California Constitution, Article XI, Section 7. The provisions of this Chapter establishing fees associated with the Storm water Compliance Program are enacted pursuant to the provisions of Sacramento County Code Title 15, Chapter 15.12 and California Constitution, Article XI, Section 7. Enactment of the fees is necessary in order to provide a source of revenue with which to defray the personnel and other costs incurred by the County in conducting the regulatory programs established and

otherwise identified by State and local laws and regulations. The costs incurred by the County for such regulatory purposes are not met by any grants by the State of California, any fees prescribed by the State, and other County revenues are insufficient to cover such costs. Fees are established to cover Program costs for a specific fiscal year that runs from July 1 through June 30. (SCC 1270 § 1, 2004; SCC 1223 § 2 (part), 2002.)

6.99.005 Definitions.

As used in this Chapter, the terms identified in Sections 6.99.010 through 6.99.030 shall be ascribed the meanings contained therein. (SCC 1223 § 2 (part), 2002.)

6.99.010 Certified Unified Program Agency (CUPA).

CUPA as defined in Division 20, Chapter 6.11, Section 25404(c) of the California Health and Safety Code refers to the Agency certified by the Secretary of the California Environmental Protection Agency. (SCC 1355 § 2, 2007; SCC 1223 § 2 (part), 2002.)

6.99.011 Auto Body Shops.

An auto body shop is defined as any commercial facility that meets the definition of Standard Industrial Classification Code 7532 except as noted below, and engages in the repair, replacement, painting, or alteration of automobile bodies or body parts when auto body work is the primary activity. This definition also includes auto body work when it is conducted as an ancillary activity within at least three hundred (300) square feet of dedicated shop space. If the facility meets the definition of SIC Code 7532 but is exclusively engaged in repair or replacement of automotive interiors, upholstery, or tops, it shall not be considered an auto body shop. This definition does not include facilities whose primary business is metal plating or powder coating, except to the extent that other activities as described above are conducted on site. (SCC 1355 § 3, 2007; SCC 1270 § 2, 2004.)

6.99.012 Auto Dealers.

An auto dealer is defined as any commercial facility engaged in the sale, leasing, or rental of new or used cars, trucks and vans, motorcycles, or other similar vehicles. This includes facilities that meet the definition of Standard Industrial Classification Codes 5012, 5511, 5521, 5571, 7513, 7514, 7515, or 7519. Some facilities in SIC Code 7999 also fit this definition. This definition excludes commercial facilities engaged exclusively in the sale of the following: automotive bodies, campers, mopeds, motor scooters, snowmobiles, trailers and mobile homes. This definition is limited to facilities that have at least five thousand (5,000) square feet of outdoor area devoted to the display of all autos as defined above, employee parking or other related purposes. (SCC 1355 § 4, 2007; SCC 1270 § 3, 2004.)

6.99.013 Auto Repair Shops.

An auto repair shop is defined as any facility engaged in the repair or replacement of car, truck, van, motorcycle or other motorized vehicle mechanical or exhaust components, or in the replacement of motor oil and other lubricants and fluids when auto repair work is the primary activity. This definition also includes auto repair work when it is conducted as an ancillary activity with at least three hundred (300) square feet of dedicated shop space. Facilities that meets the definition of Standard Industrial Classification Code Sections 7533 (exhaust system repair), 7537 (transmission repair), 7538 (general automotive repair), or 7539 (automotive repair, not elsewhere classified) or 7539 (motorcycle repair shops only) are included in this definition. Facilities in SIC Code 7539 that are engaged exclusively in frame repair, air conditioning repair, axle straightening, or wheel alignment are not included in this definition. This definition includes businesses that conduct retail or wholesale auto repair, as well as those that conduct in house auto repair to service business owned vehicles, as well as those described above. (SCC 1355 § 5, 2007; SCC 1270 § 4, 2004.)

6.99.014 Illegal Methamphetamine Manufacturing or Storage Site.

Means property where a person manufactures methamphetamine or stores methamphetamine or a hazardous chemical used in connection with the manufacturing or storage of methamphetamine. (SCC 1355 § 6, 2007.)

6.99.015 Chemical Compounds.

The number of chemical compounds shall be determined by either discreet Chemical Abstract Service (CAS) or Hazardous Waste Number or individual Material Safety Data Sheets. (SCC 1355 § 7, 2007: SCC 1223 § 2 (part), 2002.)

6.99.016 County Director.

The term "County Director" means the Director of the County Department of Environmental Management, the County staff of that Department who are subordinate to the Director, and any party designated by the Director. (SCC 1355 § 8, 2007: SCC 1270 § 5, 2004; SCC 1223 § 2 (part), 2002.)

6.99.017 Equipment Rentals.

An equipment rental facility is defined as any facility whose primary business is to rent machinery or equipment used for construction, demolition, digging and grading, building maintenance and repair, painting, plastering and texturing, landscaping, cleaning, pressure washing or steam cleaning, or similar activities. An equipment rental facility is also defined as any facility with a different primary business, but that utilizes more than two hundred (200) square feet of outdoor uncovered area for storage, display, or as a workspace associated with rental equipment (as described above), provided that the facility cleans, maintains, repairs or disposes of waste from any equipment at the site. Facilities engaged in the rental of trucks, trailers and automobiles but not also engaged in the rental of any types of equipment listed above are included in the definition of auto dealer and are not considered equipment rental facilities. (SCC 1355 § 9, 2007: SCC 1270 § 6, 2004.)

6.99.018 General Permit Industries.

A General Permit Industry is defined as any facility that should be covered under the State of California's General Industrial Storm Water Permit. (SCC 1355 § 10, 2007: SCC 1270 § 7, 2004.)

6.99.019 Hourly Rate.

The term "Hourly Rate" refers to the rate used to calculate all program fees provided for in this Chapter. The rate is calculated using methodologies approved and adopted by the Board of Supervisors. The Board of Supervisors may establish the hourly rate for up to five fiscal years in advance and may increase or decrease the hourly rate for any fiscal year if it determines that there has been a significant change in projected program costs. (SCC 1355 § 11, 2007: SCC 1270 § 8, 2004: SCC 1223 § 2 (part), 2002.)

6.99.020 Plan Review.

For purposes of this code, the term "Plan Review" is defined as a review of any necessary plans and or documents required for the issuance of a permit or any other regulatory approval. (SCC 1355 § 12, 2007.)

6.99.021 Kennels.

A kennel is defined as any facility engaged commercially in the rearing, breeding, sheltering, or boarding of dogs, and at which at least four hundred (400) square feet of area is used for the keeping of dogs. (SCC 1270 § 9, 2004.)

6.99.022 Nurseries.

A nursery is defined as any facility that meets the definition of Standard Industrial Classification Code Section 0181, Ornamental Floriculture and Nursery Products. A nursery is also an establishment that sells plants at wholesale or retail and applies pesticides or fertilizers to the plants at that location. (SCC 1270 § 10, 2004.)

6.99.026 Retail Gasoline Outlet.

A retail gas outlet is defined as any fixed facility that sells or distributes gasoline from pumps, including retail sales to the public or as a card lock facility. It does not include mobile suppliers that service fleets at the customer's work place or job site. A retail gas outlet is not a facility that operates and uses its own gasoline pump to supply gasoline to vehicles that it either owns or operates as part of its own business. (SCC 1270 § 13, 2004.)

6.99.028 Reinspection.

A reinspection means an inspection made for the purpose of determining compliance with corrective orders issued on a Notice to Comply or other official notice of an inspection report. (SCC 1355 § 13, 2007: SCC 1223 § 2 (part), 2002.)

6.99.029 Special Handling.

The term “Special Handling/Service” means any office activity including but not limited to, a plan review, permit application, or other office review that is expedited, and or any field inspection or oversight service that is provided outside of normal business hours. Special handling/service will be provided pursuant to need or request and upon availability of staff, by paying the basic fee, plus an additional fee pursuant to Section 6.99.035. (SCC 1355 § 14, 2007: SCC 1270 § 14, 2004: SCC 1223 § 2 (part), 2002.)

6.99.030 State CUPA Surcharge.

The term “State CUPA Surcharge” shall be deemed to refer to those provisions and fees prescribed pursuant to contained in Section 25404.5 Paragraph (c), and Section 25287 Paragraphs “(a)” and “(b)” of the Health and Safety Code. (SCC 1223 § 2 (part), 2002.)

6.99.035 Permit/License/ Registration/Surcharge Fees.

The County Director shall charge the regulatory, permit, inspection, re-inspection and surcharge fees provided in this chapter. The fees charged pursuant to this section shall be established by the Board of Supervisors based upon the County’s recovery of the projected program costs for that fiscal year. The permit, license, registration and surcharge fees provided for in this chapter shall not be transferable or in any other way assignable. The Board of Supervisors may establish fees for up to five fiscal years in advance based upon projected program costs. The Board may increase or decrease any and all fees for any fiscal year if it determines that there has been a significant change in projected program costs. (SCC 1355 § 15, 2007: SCC 1223 § 2 (part), 2002.)

6.99.060 Credit—Recycled Oil.

If a business which is required to pay a Hazardous Waste Generation fee pursuant to Section 6.99.035 of this Code accepts from the general public and recycles more than fifty (50) gallons of used motor oil per year, then that business shall be entitled to a credit of forty dollars (\$40.00) per year towards payment of the following year’s fee. (SCC 1223 § 2 (part), 2002.)

6.99.070 Exceptional Facility Fee—Special Fees.

If the time required by the County Director to conduct inspections or otherwise review, administer, or process issuance of those permits and licenses described by Sections 6.99.076 through 6.99.100, exceed the times specified below, an Exceptional Facility Fee, at one-half the hourly rate, shall be payable for each additional one-half hour or portion thereof:

- a. Permit to install underground storage tanks under Section 6.99.080:
 - 1. First tank 16 hours
 - 2. Each additional tank 2 hours
- b. Permit to close underground storage tanks under Section 6.99.085
 - 1. First tank 7 hours
 - 2. Each additional tank 1 hour
- c. Permit to upgrade underground storage tanks with piping under Section 6.99.086:
 - 1. First tank 13 hours
 - 2. Each additional tank 2 hours

- d. Permit to upgrade underground storage tanks without piping under Section 6.99.087 8 hours
- e. Permit to temporarily abandon underground storage tanks under Section 6.99.090 3.5 hours
- f. Permit to repair underground storage tank, piping or monitoring system under Section 6.99.100
5 hours
- 1. Permit for the replacement or repair of spill container (bucket) 3.5 Hours
- g. Fee for review of first time submittals of Risk Management Plan (RMP) under Section 6.99.135
 - 1. Level 1 facility 11 hours
 - 2. Level 2 or 3 facility 24 hours
- h. Fee for remediation or property contaminated by methamphetamine production related activities under Section 6.99.136 18 hours

(SCC 1355 § 16, 2007: SCC 1329 § 2, 2006: SCC 1238 § 4, 2003: SCC 1223 § 2 (part), 2002.)

6.99.075 Fee for Incident Response Cost Recovery.

In connection with the costs incurred by the County Director and/or the County Director's contractor for services provided in the event of a response to the release or threatened release of a hazardous material or any other substance that could potentially have a negative impact to the environment or public health, a fee based on the current hourly rate established pursuant to Section 6.99.019 shall be owed by the Responsible Party for each hour expended or portion thereof per responding specialist, plus contractor costs if any, mitigating the incident. (SCC 1355 § 17, 2007: SCC 1223 § 2 (part), 2002.)

6.99.076 Fee for Oversight of the Remediation of an Illegal Methamphetamine Manufacturing or Storage Site.

In connection with regulatory services by the County Director and or the County Director's contractor for services under Division 20, Chapter 6.9.1 of the California Health and Safety Code, a fee shall be payable in the amount established pursuant to section 6.99.035. (SCC 1355 § 18, 2007.)

6.99.080 Fee for Tank Installation.

In connection with the installation of underground storage tanks as regulated by Chapter 6.34 of this Code, a fee shall be payable in the amount established pursuant to Section 6.99.035. (SCC 1355 § 19, 2007: SCC 1238 § 5, 2003: SCC 1223 § 2 (part), 2002.)

6.99.085 Fee for Tank Closure.

In connection with regulatory services by the County Director under Chapter 6.34 of this Code, a fee shall be payable in the amount established pursuant to Section 6.99.035. (SCC 1355 § 20, 2007: SCC 1238 § 6, 2003: SCC 1223 § 2 (part), 2002.)

6.99.086 Fee for Tank(s) With Piping Upgrade.

In connection with regulatory services by the County Director under Chapter 6.34 of this Code, a fee shall be payable in the amount established pursuant to Section 6.99.035. (SCC 1355 § 21, 2007: SCC 1238 § 7, 2003.)

6.99.087 Fee for Tank(s) Without Piping Upgrade.

In connection with regulatory services by the County Director under Chapter 6.34 of this Code, a fee shall be payable in the amount established pursuant to Section 6.99.035. (SCC 1355 § 22, 2007: SCC 1238 § 8, 2003.)

6.99.090 Fee for Tank Temporary Abandonment.

In connection with regulatory services by the County Director under Chapter 6.34 of this Code, a fee in the amount established pursuant to Section 6.99.035. (SCC 1355 § 23, 2007: SCC 1223 § 2 (part), 2002.)

6.99.100 Fee for Pipe or Monitoring System Repair.

In connection with regulatory services by the County Director under Chapter 6.34 of this Code, a fee in the amount established pursuant to Section 6.99.035 shall be paid in connection with the repair of a pipe as defined in Section 25281.5 of the Health and Safety Code for an existing underground storage tank facility or repair of a monitoring system for such facility. (SCC 1355 § 24, 2007: SCC 1238 § 9, 2003: SCC 1223 § 2 (part), 2002.)

6.99.105 Fee for Well Construction and Concurrent Pump Installation.

In connection with services by the County Director under Chapter 6.28 of this Code, a fee shall be payable in the amount established pursuant to Section 6.99.035. (SCC 1355 § 25, 2007: SCC 1223 § 2 (part), 2002.)

6.99.135 Fee for California Accidental Release (CAL ARP) Prevention Program.

In connection with the regulatory services provided under Chapter 6.96 of this Code, fees for first-time submittals of Risk Management Plans (RMPs) shall be in the amounts established pursuant to Section 6.99.065. The established review times for initial submittals are estimated to be eleven (11) hours for Program Level 1 facilities and twenty-four (24) hours for Program Level 2 and 3 facilities. If a facility changes its operation in a way that does not require a new RMP, the fee for reviewing any revisions requiring agency submittal shall be based upon actual review time on an hourly basis as established pursuant to Section 6.99.065. The annual regulatory program fees for CAL ARP facilities shall be established pursuant to Section 6.99.035. (SCC 1296 § 1, 2005: SCC 1238 § 12, 2003: SCC 1223 § 2 (part), 2002.)

6.99.147 Permit Extension Fee.

In connection with the issuance of a one time extension of any permit granted under Sections 6.99.080 through 6.99.105 a fee equal to twenty (20) percent of the original permit shall be paid. (SCC 1355 § 26, 2007: SCC 1223 § 2 (part), 2002.)

6.99.150 Reinspection Fee.

Whenever, in connection with regulatory services delivered under Chapters 6.28, 6.34, 6.96 or 6.98 of this Code more than one inspection by the County Director is required in connection with a particular activity which is regulated or in which a regulatory violation is identified, a reinspection fee in the amount established pursuant to Section 6.99.065 shall be payable for each one-half hour or portion thereof of time consumed by each reinspection. (SCC 1223 § 2 (part), 2002.)

6.99.160 Consultation Fee.

A fee in the amount established pursuant to Section 6.99.019 shall be payable for each hour or portion thereof of service delivered by the County Director in connection with site remediation, investigation and/or consultation activities required or requested in connection with the contamination of a site by discharge of a hazardous substance, material or waste. (SCC 1355 § 27, 2007: SCC 1223 § 2 (part), 2002.)

6.99.165 Appeal Filing Fee.

Any person authorized to file an appeal under Chapters 6.28, 6.34, 6.96 or 6.98 shall, at the time of filing the appeal and as a condition precedent to the legal effectiveness of the appeal, pay an appeal filing fee in the amount established pursuant to Section 6.99.065. (SCC 1223 § 2 (part), 2002.)

6.99.175 Food Facility Fee.

a. The annual regulatory program fees for a food facility as defined in California Health and Safety Code Section 114380 through Section 114387 shall be established pursuant to Section 6.99.035 for the following facilities:

Food Preparation Establishment (without hood)
Restaurant
Bar
Restaurant/Bar
School/Non Profit Sr. Meal Program
Bakery-No Preparation
Caterer/Low Risk
Caterer/High Risk
Temporary Food Facility (Food Prep/High Risk)
Temporary Food Facility (Packaged Food/Low Risk)
Temporary Food Facility Multi-Event (Food Prep/High Risk)
Temporary Food Facility Multi-Event (Packaged Food/Low Risk)
Produce Stand
Certified Farmers' Market
Retail Mkt (15,000 + Sq.Ft.)
(6,000-14,999 Sq.Ft.)
(Less Than 6,000 Sq. Ft.)
Mobile Food Facility
(Category A)
(Category B)
(Category C)
(Category D)
Mobile Support Unit
Commissary
Satellite Food Dist. Fac.
Seasonal/Low Risk
Seasonal/High Risk
Restricted Food Service Est.
Swap Meet Prepackaged Food Stand (Variable Locations)

b. A Mobile Food Facility Category A is a vehicle as defined in California Health and Safety Code Section 113831 that is permitted to sell prepackaged food, whole uncut produce, whole fish, and whole aquatic invertebrates.

c. A Mobile Food Facility Category B is a vehicle as defined in California Health and Safety Code Section 113831 that is permitted to sell unpackaged food that requires no preparation other than heating, popping, blending, portioning, or dispensing. The Mobile Food Facility Category B utilizes a mobile support unit or a permitted facility for its commissary.

d. A Mobile Food Facility Category C is a vehicle as defined in California Health and Safety Code Section 113831 that is permitted to sell unpackaged food that requires no preparation other than heating, popping, blending, portioning or dispensing. The Mobile Food Facility Category C utilizes an onsite commissary that is not used by any other mobile food facility and is not permitted as a separate food facility.

e. A Mobile Food Facility Category D is a vehicle as defined in the California Health and Safety Code, section 113831 that is permitted to sell unpackaged food that is cooked or baked on the vehicle or any unpackaged food that requires preparation beyond heating, popping, blending, portioning or dispensing.

f. A Food Preparation Establishment (without hood) is a "food facility" as defined in Section 113789 of the California Health and Safety Code that handles unpackaged food, and in which any installed heat processing equipment is limited to equipment that does not require mechanical exhaust ventilation pursuant to Section 114149.1 of the Health and Safety Code. (SCC 1355 § 28, 2007: SCC 1223 § 2 (part), 2002.)

6.99.180 Community Event Permit Fees.

a. Sections 114338.1 through 114381.2 of the California Health and Safety Code require that the person or organization in control of any community event having temporary food facilities must obtain a permit.

The applicant for a permit shall pay fees established pursuant to Section 6.99.035 based upon one of the following categories:

1. Community Event Permit—five or fewer Temporary Food Facilities.
2. Community Event Permit—six or more Temporary Food Facilities.
3. Community Event Permit—five or fewer Non-Profit Temporary Food Facilities.

b. No fee shall be charged to nonprofit charitable temporary food facilities, nor to the person or organization responsible for the nonprofit charitable temporary food facilities that operate in conjunction with a community event as defined in Section 113755 of the Health and Safety Code, provided that there are no more than five temporary food facilities at such event and provided all facilities are nonprofit charitable temporary food facilities as defined in Section 113842 of the Health and Safety Code. The County Director shall make educational materials concerning basic concepts of food protection available to the participants of such events.

c. In addition to the Community Event Permit, the operator of each complying Temporary Food Facility must also obtain a permit. Permit fees shall be established pursuant to Section 6.99.035 based upon the following two categories:

Temporary Food Facility—Packaged Foods/Low Risk

Temporary Food Facility—Prepared Foods/High Risk

d. A penalty fee established pursuant to Section 6.99.035 shall be charged to the person or organization in charge of any community event when no permit has been obtained at least two weeks prior to the event.

e. A late fee established pursuant to Section 6.99.035 shall be charged to the operator of any Temporary Food Facility when no permit has been obtained at least two weeks prior to the event.

f. If the applicant for permit to operate a temporary food facility desires to operate at multiple events, a multi-event permit may be issued provided the operator of the temporary food facility:

1. Uses the annual permit only at permitted community events;
2. Completes a risk assessment sheet and receives approval from the County Director for food protection operating procedures, including storage, transportation, preparation, holding and serving, as well as approval for any changes in such procedures;
3. Completes and posts the self-inspection check list prior to operating at each event;
4. Operates in compliance with all applicable laws and codes;
5. Obtains a separate permit for each facility if the applicant operates more than one facility at an event;
6. Provides a list of events at which the applicant plans to operate;
7. Provides proof of satisfactory completion of a class within the three years preceding application approved by the County Director in basic fundamentals of food protection for food preparation operators;
8. Applies for the multi-event permit prior to operating and pays any applicable fees; and
9. Submits a menu.
10. Utilizes an approved commissary and submits a valid commissary letter

The annual multi-event permit fees shall be established pursuant to Section 6.99.035 for the following:

Temporary Food Facility Multi-event (Pkg. Foods/Low Risk)

Temporary Food Facility Multi-event (Food Prep/High Risk) (SCC 1355 § 29, 2007; SCC 1223 § 2 (part), 2002.)

6.99.185 Food Facility Reinspections.

The reinspection fee for food facilities as defined in California Health and Safety Code Section 113700 through Section 113910 shall be established pursuant to Section 6.99.035 for the following facilities:

Food Preparation Establishment (without hood)

Restaurant

Bar

Restaurant/Bar

School/Non Profit Sr. Meal Program

Bakery No Preparation

Caterer/Low Risk

Caterer/High Risk

Temporary Food Facility (Food Prep/High Risk)

Temporary Food Facility (Packaged Food/Low Risk)

Temporary Food Facility Multi-Event (Food Prep/High Risk)

Temporary Food Facility Multi-Event (Pkgd Food/Low Risk)
Produce Stand
Certified Farmers' Market
Retail Mkt (15,000 + Sq. Ft.)
(6,000-14,999 Sq. Ft.)
(Less Than 6,000 Sq. Ft.)
Mobile Food Facility (Category A)
Mobile Food Facility (Category B)
Mobile Food Facility (Category C)
Mobile Food Facility (Category D)
Mobile Food Prep. Unit
Mobile Support Unit
Commissary
Satellite Food Dist. Facility
School Satellite Facility
Restricted Food Service Est.
Swap Meet Prepackaged Food Stand
(Variable Locations)
Seasonal (Low Risk)
Seasonal (High Risk)
(SCC 1355 § 30, 2007: SCC 1333 § 30, 2006: SCC 1223 § 2 (part), 2002.)

6.99.190 Bakery—No Preparation.

The term "Bakery—No Preparation" means a bakery wherein no products are prepared or processed from the beginning state. (SCC 1223 § 2 (part), 2002.)

6.99.195 Multiple Food Facilities.

Any premises with multiple food facilities operating under the same ownership, shall pay the following fees: one hundred (100) percent of the annual fee for the type facility with the highest prescribed fee, and seventy (70) percent of each remaining fee. temporary food facilities, mobile food facilities, mobile support units, swap meet prepackaged food stands, or satellite food distribution facilities shall not be included as multiples and shall pay the basic fee. (SCC 1355 § 31, 2007: SCC 1223 § 2 (part), 2002.)

6.99.200 Nonprofit.

Any charitable or nonprofit organization which is exempt from payment of income taxes by ruling of the Director of Internal Revenue Service. (SCC 1223 § 2 (part), 2002.)

6.99.205 Reinspection Fee—General.

Except as otherwise specified in this Code any fee for a reinspection as defined in Section 6.99.028 shall be established pursuant to sections 6.99.170 and 6.99.172. (SCC 1270 § 16, 2004; SCC 1223 § 2 (part), 2002.)

6.99.210 Operation of a Food Facility Without a Permit.

Any food facility as defined in California State law operating without a permit shall be subject to closure of the facility and a penalty fee not to exceed three times the annual permit fee established for such food facility pursuant to Section 6.99.170. (SCC 1333 § 29, 2006: SCC 1223 § 2 (part), 2002.)

6.99.211 Mandatory Food Safety Education Course Fee.

A per person and per class fee for the Food Safety Education Course shall be established pursuant to Sections 6.99.035 and 6.04.022. (SCC 1355 § 32, 2007.)

6.99.215 Plan Review.

For purposes of this Code, Plan Review is defined as a review of three sets of construction plans for all proposed new food facilities, public swimming pool, spa pool, or wading pool facilities or the remodeling of such existing facilities for compliance with State or local laws and regulations. Fees are due and

payable when plans are submitted to the Environmental Management Department for review. (SCC 1223 § 2 (part), 2002.)

6.99.220 New Food Facility Construction Plan.

A new food facility construction plan shall consist of a plan for a room, building, or place, or portion thereof, intended for use as a food facility. Fees for review of new food facility construction plans are based on square footage and shall be established pursuant to Section 6.99.170 for the following facilities:

- a. Prepackaged foods only
 - b. Food facilities without hoods
 1. Less than 2000 sq. ft.
 2. 2,000 sq. ft. to 5,999 sq. ft.
 3. 6,000 sq. ft. or more
 - c. Food facilities with hoods
 1. Less than 2,000 sq. ft.
 2. 2,000 sq. ft. to 5,999 sq. ft.
 3. 6,000 sq. ft. or more
- (SCC 1223 § 2 (part), 2002.)

6.99.225 Major Remodel Food Facility Construction Plan.

For purposes of this section, the phrase “major remodel of a food facility” means the remodeling or revisions to a food facility, as defined in the Health and Safety Code, to thirty (30) percent or more of the food service related areas, not including the dining area. The terms “major remodel” or “revision” shall include but not be limited to structural alterations to food preparation and storage rooms, removal or replacement of food service equipment, changes in mechanical or plumbing fixtures, or changes in materials and finishes. Fees for review of construction plans for major remodel of a food facility are based on square footage and shall be established pursuant to Section 6.99.170 for the following facilities:

- a. Prepackaged foods only
 - b. Food facilities without hoods
 1. Less than 2,000 sq. ft.
 2. 2,000 sq. ft. to 5,999 sq. ft.
 3. 6,000 sq. ft. or more
 - c. Food facilities with hoods
 1. Less than 2,000 sq. ft.
 2. 2,000 sq. ft. to 5,999 sq. ft.
 3. 6,000 sq. ft. or more
- (SCC 1223 § 2 (part), 2002.)

6.99.230 Minor Remodeling Food Facility Construction Plan.

For purposes of this section the phrase “minor remodel of a food facility” means the remodeling or revisions to a food facility, as defined in the Health and Safety Code, of less than thirty (30) percent of the food service related areas excluding the dining area, including resubmitted plans. The fee for review of a minor remodel plan shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.235 Minor Remodel Plan Review for Single Piece of Food Equipment.

For purposes of this section, a minor remodel plan review for a single piece of food equipment is the review of plans for a single piece of food equipment and related items, such as, the addition of an oven and hood. The fee for review of a single piece of equipment for a food facility shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.240 Miscellaneous Food Facility Plan Review.

The fee for review and approval of additional food facility plans previously approved by the Environmental Health Division shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.245 Public Swimming Pool.

The annual regulatory program fees for a public swimming pool, spa pool and wading pool as defined in California Code of Regulations Title 22, Section 65501(a), (f) and (b) shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.250 Swim Pools with Single Recirculation System.

The annual regulatory program fee for one or more public swim pools that are served by a single recirculation, disinfection, and filtration system, as approved by the County Director, shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.255 Multiple Swimming, Spa, or Wading Pools.

Fees for premises with multiple swimming, spa, or wading pools operating under the same ownership shall be computed at one hundred (100) percent for the highest fee and seventy (70) percent of each remaining fee. (SCC 1223 § 2 (part), 2002.)

6.99.256 Temporarily Inactive Fee-Pool/Spas.

For the purposes of this section, the phrase "Temporarily Inactive Pool, Spa, or Wading Pool" shall mean any pool, spa or wading pool that is maintained empty or unused. The fee for temporarily inactive pool, spa or wading pool shall be established pursuant to Section 6.99.035. (SCC 1355 § 33, 2007.)

6.99.260 Public Swimming Pool Reinspection.

The reinspection fee for a public swimming pool, spa pool and wading pool as defined in California Code of Regulations Title 22, Section 65501(a), (b) and (d) shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.265 Optional Swimming Pool Service Company Registration.

In connection with Registration of Swimming Pool Service Companies by the County Director per Section 6.64.030, the fee for each company shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.270 New Swimming Pool, Spa Pool, Wading Pool or Recreational Water Theme Park Plan Review.

The fee for the review of new construction plan for a public swimming pool, public spa pool, public wading pool or recreational water theme park shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.275 Major Remodel Plan Review for Public Swimming Pool, Spa Pool and Wading Pool.

For purposes of this section major remodeling plan for a public pool, spa or wading pool shall mean remodeling or revision to such a plan of thirty (30) percent or more of the swimming pool, spa pool or wading pool structural area, excluding replacement of equipment solely for repair purposes. The fee for review by the County Director of a major remodeling plan for a public swimming pool, public spa, or public wading pool shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.280 Minor Remodel Plan Review for Public Swimming Pool, Spa and Wading Pool.

For the purposes of this section, a minor remodeling plan for a public swimming pool, spa or wading pool includes resubmitted plans; remodeling or revision shall mean remodeling or revisions to such a plan of less than thirty (30) percent of the swimming pool, spa pool or wading pool structural area or equipment alterations, excluding replacement of equipment solely for repair purposes. The fee for the review by the County Director of minor remodeling plans for a public swimming pool, public spa, or public wading pool shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.285 Minor Remodel Plan Review for Single Piece of Recirculation Equipment.

For purposes of this section a minor remodel plan review for a single piece of recirculation equipment is the review of plans for the replacement of a swimming pool, public spa, or wading pool pump, filter,

sanitizer or other recirculation equipment, excluding replacement of equipment solely for repair purposes. The fee for review of a minor remodel plan for a single piece of recirculation equipment shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.290 Plan Review for Addition of a Single Attraction to a Recreational Water Theme Park.

For purposes of this section a plan review for addition of a single attraction to a recreational water theme park is the review of plans for a single attraction and related appurtenances to an existing recreational water theme park. The fee for plan review for addition of a single attraction shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.300 Miscellaneous Plan.

For purposes of this section a miscellaneous public swimming pool, public spa and public wading pool construction plan is the review of three additional copies of a plan previously approved by the County Director. The fee for review of miscellaneous public swimming pool, public spa or public wading pool plans shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.305 Construction Inspection.

Construction inspection of a public swimming pool, public spa and public wading pool shall consist of a pre-gunite and final inspection. Fees shall be paid when construction plans are submitted for review and shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.310 Public Swimming Pools, Spas, and Wading Pool Construction Reinspection.

The fee for a reinspection by the County Director for construction inspection shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.315 Small Public Water System.

Small public water systems are those systems as defined in the California Health and Safety Code, Section 116275. A new permit application fee, permit amendment fee, repair permit fee and an annual fee for each small public water system regulated by the County Director shall be established pursuant to Section 6.99.035. (SCC 1355 § 34, 2007; SCC 1223 § 2 (part), 2002.)

6.99.320 Protection of Drinking Water Cross Connection Control Tag Fees.

The fee for an approved tag for each backflow assembly tested in compliance with Sacramento County Code Section 6.30.100 shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.325 Plot Plan.

The fee for review and tentative approval of a plot plan for individual water well and/or septic system shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.330 On site Sewage Treatment (Septic Tank) System.

In connection with services by the County Director under Chapter 6.32 of this code, fees in the amount established pursuant to Section 6.99.035 shall be payable. (SCC 1355 § 35, 2007; SCC 1223 § 2 (part), 2002.)

6.99.335 Test Drilling and Engineering Review.

The fee for Test Drilling and Engineering Review as required by Rules and Regulations of the Environmental Health Division, adopted pursuant to SCC Section 6.32.130, shall be established pursuant to Section 6.99.170 for each review or test drilling. (SCC 1223 § 2 (part), 2002.)

6.99.340 Septic Tank Abandonment Fee.

The fee for a permit to abandon a septic tank shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.345 Consulting Services.

The fee for consultations for the installation, location or abandonment of an onsite sewage treatment (septic) system shall be established pursuant to Section 6.99.035. (SCC 1355 § 6, 2007: SCC 1223 § 2 (part), 2002.)

6.99.350 Septic Tank Cleaner Registration Fee.

The fee for the registration of a septic tank cleaner as required by Health and Safety Code Section 117400 shall be established pursuant to Section 6.99.170 for each pump truck. (SCC 1223 § 2 (part), 2002.)

6.99.400 Detention Facilities Fees.

The annual reimbursement from the Sheriff's Department and Probation Department for environmental health regulatory oversight of detention facilities as defined in California Health and Safety Code, Section 101045, shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.405 Employee Housing.

Unless otherwise stated in this Chapter, the annual fees for an employee housing facility or farm labor camp shall be established pursuant to Section 6.99.170 for the following:

a. Fee per employee.

b. Employee Housing Facility or Farm Labor Camp with Biennial Inspection.

(An employee housing facility or farm labor camp with biennial inspection is an employee housing facility or farm labor camp that meets minimum standards and no major code violations are encountered during the inspection. A major code violation is a condition which typically cannot be corrected in one day.)

c. Employee Housing Facility or Farm Labor Camp with Annual Inspection.

(An employee housing facility or farm labor camp with annual inspection is an employee housing facility or farm labor camp that fails to meet minimum standards and a major code violation is encountered during the inspection. A major code violation is a condition that typically cannot be corrected in one day.) (SCC 1223 § 2 (part), 2002.)

6.99.410 Employee Housing Reinspection Fee.

The fee for reinspection of an employee housing facility or farm labor camp shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.415 Private School License Inspections.

The fees for inspections of nonpublic schools as requested, or as required by Title 5, California Code of Regulations, Section 3064, and California Education Code, Section 56366.1, shall be established pursuant to Section 6.99.170 for each inspection. (SCC 1223 § 2 (part), 2002.)

6.99.420 Hotel/Motel Compliance Program Fees.

The fees for inspections of hotels/motels pursuant to the Sacramento County Hotel/Motel Compliance Program (Chapter 16.21 of the Sacramento County Code) shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.425 Medical Waste Facility Inspection Fee.

The fee for medical waste facilities as defined in Division 2 and Division 22 of the Health and Safety Code shall be established pursuant to Section 6.99.170 for the following:

a. Large Quantity Medical Waste—Acute Care Hospital.

1 to 99 Beds

100 to 199 Beds

200 to 250 Beds

250+ Beds

b. Onsite Treatment of Medical Waste

c. Medical Waste—Skilled Nursing Facility

1 to 199 Beds

200+ Beds

d. Medical Waste Small Quantity Generator—Offsite Treatment

- e. Medical Waste Small Quantity Generator—Onsite Treatment
- f. Limited Quantity Hauling Exemption
- g. Medical Waste—Common Storage Facilities
 - 2 to 15 Generators
 - 16 to 49 Generators
 - 50+ Generators
- h. Medical Waste Clinic/ Laboratory/ Mortuary/ Primary Care
- i. Tattoo/Body Art/Permanent Cosmetics
(SCC 1223 § 2 (part), 2002.)

6.99.430 Medical Waste Noncompliance.

The medical waste noncompliance fee for purposes of this section is defined as a fee charged to a medical waste generator which generates less than two hundred (200) pounds of medical waste each calendar month and is in violation of the Medical Waste Act, Division 20, Chapter 6.1 of the Health and Safety Code as determined by an onsite inspection. The noncompliance fee shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.435 Solid Waste Facility Fee.

a. The annual fee for solid waste handling or disposal facilities, as defined in Title 14 and Title 27 of the California Code of Regulations, and Division 30 of the California Public Resources Code, shall be established pursuant to Section 6.99.170 for the following:

- Municipal Solid Waste Landfill
- Construction, Demolition, Inert Landfill
- Transfer/Processing Facility
- Composting Facility, Quarterly Inspection
- Composting Facility, Monthly Inspection
- Organic Processor/Chip & Grind
- Non-traditional Facility

b. In addition to the fee in subsection (a), each solid waste handling or disposal facility shall be assessed a regional fee for a share of the annual regional program costs pursuant to Section 6.99.170. The amount of the fee for each facility shall be based upon the percent of the total County-wide tonnage received at each facility. The annual County-wide tonnage shall be determined based upon the tonnage reported to the County Director for the last three quarters (April 1—December 31) of the prior calendar year and the first quarter (January 1—March 31) of the current calendar year. This assessment shall be based upon the percent of the total annual County-wide tonnage received at the facility gate.

c. Each facility shall report the tonnage received at the facility gate on a quarterly basis within fifteen (15) days following the end of each quarter.

d. In the event that a new solid waste handling or disposal facility is added during the fourth quarter of the current fiscal year wherein no appropriate history of tonnage (12 months) exists, then the regional fee shall be based upon estimated tonnage for the fourth quarter of the current fiscal year. (SCC 1228 § 1, 2002; SCC 1223 § 2 (part), 2002.)

6.99.440 Closed Site, Refuse Vehicle, Refuse Exemption, and New Facility Permit.

The annual fee for a closed site, refuse vehicle, refuse exemption, and processing a new facility permit shall be established pursuant to Section 6.99.035 for the following:

- Closed Site, Quarterly Inspection
- Closed Site, Annual Inspection
- Refuse Vehicle
- Refuse Exemption
- New Facility Permit

(SCC 1355 § 37, 2007; SCC 1223 § 2 (part), 2002.)

6.99.445 Enforcement Action.

Cost recovery for enforcement action shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.450 Fixed Mechanical Plan Approval.

For purposes of this section a fixed mechanical plan approval is the tentative approval of a plan by the County Director to determine compliance with Sacramento County Code, Chapter 6.68. The fee for each such plan approval shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.455 Acoustical Report Review.

For purposes of this section an acoustical report review is the review by the County Director of a construction plan for compliance with Sacramento County Code, Chapter 6.68. The fee for an acoustical report shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.460 Special Condition Permit.

The fee for an application for a special condition permit as provided for in Section 6.68.190 shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.465 Noise Ordinance Compliance Inspection.

The fee for determination of compliance to a previous order of correction as issued by the County Director for a violation of Chapter 6.68 shall be established pursuant to Section 6.99.170. (SCC 1223 § 2 (part), 2002.)

6.99.470 Document Search Fee.

A fee established pursuant to Section 6.99.170 shall be charged to any consulting firm, realtor, lending institution or other commercial enterprise for services performed by the County Director in searching files for the purpose of complying with document research requests by those enterprises. (SCC 1223 § 2 (part), 2002.)

6.99.475 Smoking Control.

For purposes of enforcement of the provisions of Title 37 of the Sacramento City Code, Chapters 4.61 and 6.84 of the Sacramento County Code, and California Labor Code Section 6404.5, the fees for a smoking exemption, permit, renewal, revised plan, reinspection or complaint verification, additional testing, and laboratory costs shall be established pursuant to Section 6.99.170 for the following:

a. Smoking Exemption or Permit

-Includes application, plan review, and one on-site performance evaluation

b. Renewal of Smoking Exemption or Permit

-Includes application review and one on-site performance evaluation

c. Revised Plan

-Includes review of revised plan

d. Inspection/Reinspection Fee

-Includes the issuance of an official notice when it is determined such facility is not in compliance or a reinspection of facility for compliance with applicable codes

e. Additional Testing

-Includes additional testing at the facility as directed by any special condition of the exemption or permit and shall be charged for each site evaluation

f. Laboratory Costs

-Applicant or permittee shall pay the actual costs for any laboratory testing as required by a special condition of the exemption or permit

(SCC 1223 § 2 (part), 2002.)

6.99.480 Surcharge.

If the County Director is requested or required to perform regulatory functions or work in excess of the cost recovery provided by the fees established pursuant to this Chapter, a surcharge to recover the excess costs shall be assessed at the hourly rate established pursuant to Section 6.99.019. (SCC 1355 § 38, 2007; SCC 1223 § 2 (part), 2002.)

6.99.485 Permit or License—Denial, Suspension, Revocation.

Except as prohibited by federal or State law or regulation, or local ordinance or regulation, the County Director shall be authorized to deny, suspend, revoke, or refuse to renew any permit or license to any party or responsible parties wherein any license, permit, or program cost recovery fees are unpaid and delinquent pursuant to this Chapter. Any decision of the Director to deny, suspend, revoke, or refuse to renew any permit or license may be appealed to the Hearing Authority pursuant to procedures adopted by the Director. Any such appeal shall be in writing, shall state the specific reasons therefore and grounds asserted for relief, and shall be filed with the Director not later than fifteen (15) days after the date of service of any such decision. If an appeal is not filed within the time or in the manner prescribed above, the right to review shall be deemed to have been waived. "Hearing Authority" shall be deemed to refer to one or more persons assigned the responsibility of conducting a hearing by the County Executive. (SCC 1223 § 2 (part), 2002.)

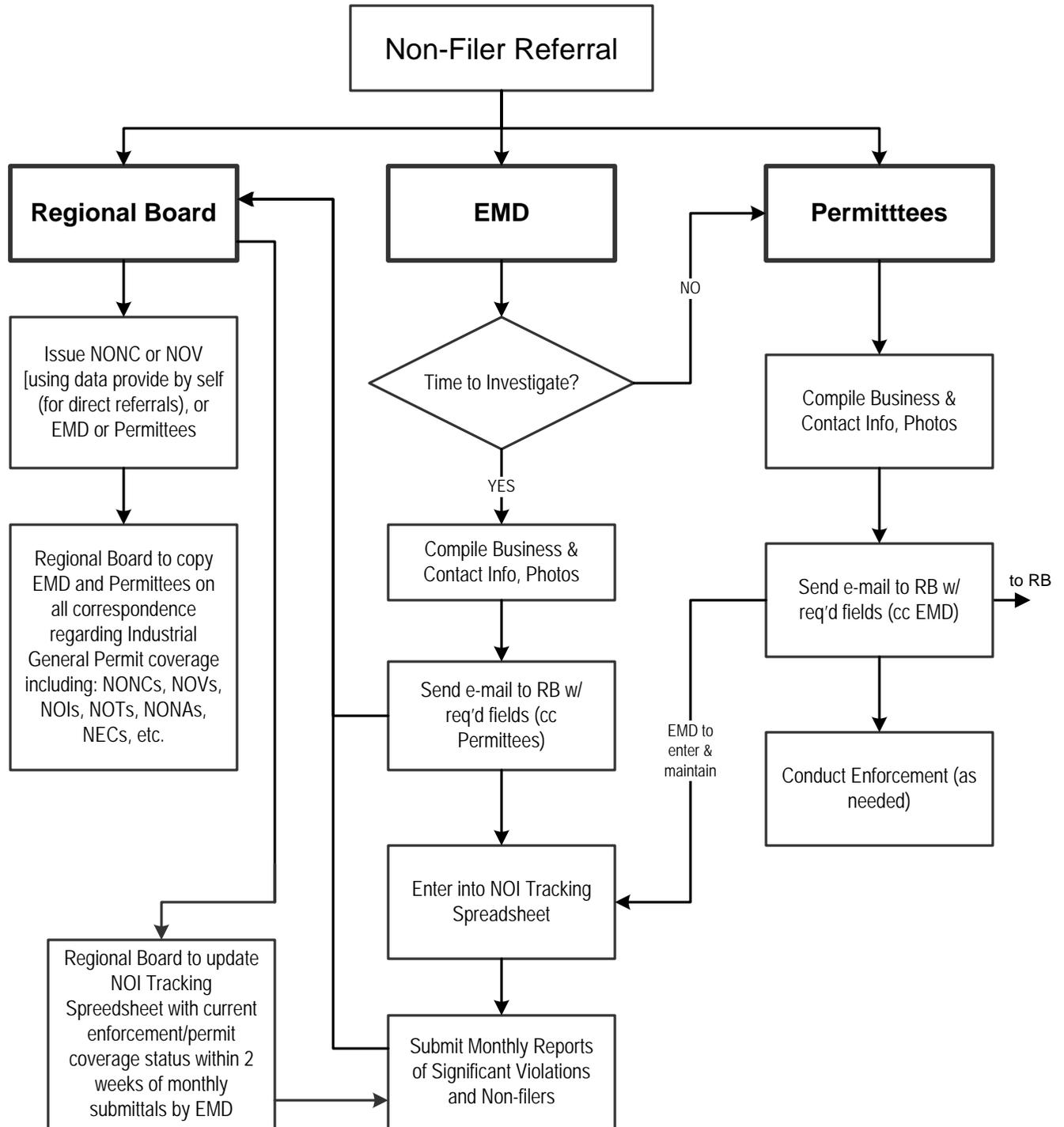
6.99.490 Liability.

All fees prescribed by this Chapter shall be owing by and collectable from: (1) the owner of any land upon which hazardous material or hazardous waste is situated and to which the regulatory activities associated with the fee relate; (2) the lessee or operator of any business or enterprise responsible for hazardous materials or hazardous wastes to which the regulatory activities associated with the fee relate; (3) any contractor who undertakes activities pertaining to hazardous materials or hazardous waste which are regulated by Chapters 6.28, 6.34, 6.96 or 6.98; (4) the owner of any business for which any permit, regulatory, inspection, or plan review fees are provided in this chapter; and (5) the operator of any business for which any permit, regulatory, inspection, or plan review fees are provided in this Chapter. The foregoing parties shall be jointly and severally liable for any and all such fees. (SCC 1223 § 2 (part), 2002.)

6.99.495 Collection.

The County Director shall be responsible for the collection of all fees prescribed by this Chapter. All fees the exact or estimated amount of which can be calculated at the time an application for a Permit or License under Chapters 6.28, 6.34, 6.96 or 6.98 is filed of this Code, shall be so calculated and estimated, and owing pursuant to the filing of the application. No application for such a Permit or License shall be deemed to be complete or valid unless all fees calculated and estimated by the County Director have been submitted with the application. The County Director shall be authorized to order refunds and the County Auditor-Controller shall draw warrants for such refunds in such amounts as the County Director prescribes in connection with any fees collected at the time of application for a Permit or License which were overestimated. Any fees prescribed by this Chapter not collected by the County Director at the time of application for a Permit or License required by Chapters 6.28, 6.34, 6.96 or 6.98, and all other fees prescribed by this Chapter, shall be billed by the County Director to the party or parties responsible for payment therefore. A fee which is owing and unpaid shall become delinquent thirty (30) calendar days following the date of mailing by the County Director of the billing. A delinquency charge in an amount of ten (10) percent of the outstanding account balance, but not less than seventy-five dollars (\$75.00) shall be applied and collectable from the parties responsible in connection with all delinquent accounts. All costs, beyond those recovered by any delinquency charge either directly or indirectly incurred by the County Director, including but not limited to court costs, collection costs and handling charges, in collecting unpaid and delinquent accounts shall be owed by the responsible party or parties. The County Director shall be authorized to file and diligently prosecute in the name of the County civil suits in Small Claims Courts and/or Municipal/Superior Courts of competent jurisdiction or seek liens in the name of the County for the collection and recovery of delinquent fees and/or other charges prescribed by this Chapter. (1355 § 39, 2007: SCC 1355 § 39, 2007: SCC 1223 § 2 (part), 2002.)

Referral Process for Industrial General Permit Non-Filers



SEPTEMBER 21, 2009
updated November 10, 2009

2009-2012

NPDES Receiving Water Toxicity Sampling & Analysis Plan

submitted to:

COUNTY OF SACRAMENTO
CITY OF SACRAMENTO
CITY OF CITRUS HEIGHTS
CITY OF ELK GROVE
CITY OF FOLSOM
CITY OF GALT
CITY OF RANCHO CORDOVA

prepared by:

LARRY WALKER ASSOCIATES

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Overview

The Sacramento Stormwater National Pollutant Discharge Elimination System (NPDES) Monitoring Program includes a provision to complete water column toxicity monitoring as required by Monitoring and Reporting Program (MRP) Section II.D of the National Pollutant Discharge Elimination System (NPDES) permit (CAS082597). This sampling and analysis plan (SAP) is designed to satisfy this requirement.

During the 2009/10 and 2011/12 wet seasons, grab samples (or cross sectional composite samples collected directly or through a pump) will be collected from three creeks and two rivers in Sacramento County (Arcade Creek, Willow Creek, Laguna Creek, Sacramento River and American River). The Sacramento Stormwater Quality Partnership (Partnership) will collect samples during two wet weather events and one dry weather event twice during the permit term, between July 1, 2009 and June 30, 2010 and between July 1, 2011 and June 30, 2012. All six monitoring events over these two years will include chronic aquatic toxicity testing with two freshwater test species, fathead minnow (*Pimephales promelas*) and water flea (*Ceriodaphnia dubia*). Toxicity identification evaluations (TIE) using the acute or chronic toxicity test method is triggered if any one sample causes greater than 50% mortality compared to the control. The TIE is also supported by the extensive water column chemistry sampling that is also concurrently performed at all seven sites.

The Partnership will perform an algal growth test using the species *Selenastrum capricornutum* for the first flush event in the 2011/12 monitoring year. Details of the algal growth sampling methods and potential follow-up TIEs will be included in an updated SAP to be included in the Partnership 2009/10 Annual Report.

When possible, the Partnership will coordinate toxicity monitoring with urban tributary, river, and urban runoff discharge monitoring. The information included in this document is also provided in the Urban Tributary Sampling and Analysis Plan and the river sampling coordination plan, which are both prepared annually. All river sampling is performed under the Coordinated Monitoring Program (CMP) under agreement with Sacramento Regional County Sanitation District.

SAMPLING SITES

The Partnership selected urban tributary and river sampling locations to assess the impact of urban runoff discharge.

Urban Tributary Sites

The urban tributary sites are located on three urban creeks in the City of Folsom, the City of Sacramento and Sacramento County.

Laguna Creek (LC02)

The Laguna Creek Watershed encompasses approximately 50 mi² of land draining to Laguna Creek and its tributary streams, starting in the Sunrise area of northeast Sacramento County and flowing southwest through Elk Grove to Morrison Creek and eventually to the Sacramento River.

For this monitoring program, the monitoring point has been established downstream from the West Stockton Blvd. Bridge adjacent to SR 99.



Access to the site is from West Stockton Blvd. From SR 99, exit at Laguna Blvd and travel west. Turn north on West Stockton Blvd. Travel approximately 0.5 miles. Turn Left on Wooded Brook Drive and park immediately on the north side of the road where parking is available as shown in **Figure 1**. The monitoring site is on the downstream side of the bridge over Laguna Creek, accessible either from shore or from the sidewalk crossing over the creek.

Arcade Creek (AC03)

The Arcade Creek watershed includes 40 mi² of urban development within the Cities of Sacramento and Citrus Heights, and unincorporated areas of Sacramento County. The creek flows for approximately 16 miles in a southwest direction to its confluence with the Natomas East Main Drainage Canal near Gardenland and Johnston Parks in the City of Sacramento. The monitoring site is located downstream from the Watt Avenue Bridge and the USGS gauging station.

Access to the site is from Watt Avenue. From I 80 or Business 80, exit at Watt Avenue. Travel south on Watt from I 80. Travel north on Watt from Business 80. Turn west on Longview Dr and proceed a short distance to the entrance of Del Paso Park on the left. Park along the shoulder just inside the entrance to the park as shown in **Figure 2**. The actual sampling location is located under the bridge to Del Paso Park. If conditions are unsafe, alternate locations can be considered upstream from Bridge Road off of Auburn Boulevard, or further downstream from Longview Drive.

Willow Creek (WC01)

The Willow Creek watershed includes both urban and rural areas within the City of Folsom and eastern Sacramento County. The creek flows for over six miles in a southwest direction to its confluence with Lake Natoma. The monitoring site is located at the bridge where Blue Ravine Road crosses Willow Creek.

Access to the site is from Hwy 50. Exit at Folsom Blvd and travel north. Turn left on Blue Ravine Rd and park on the right side of the road near the bridge as shown in **Figure 3**.

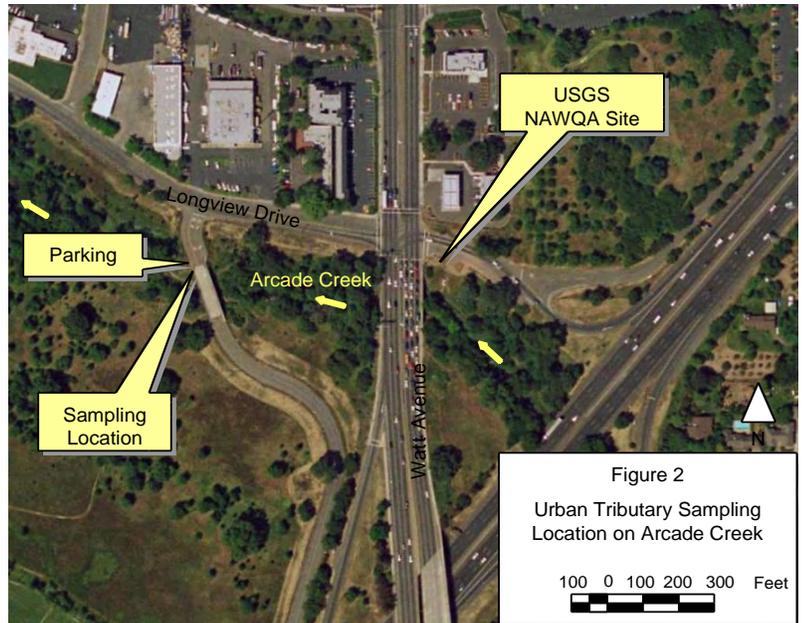


Figure 2
Urban Tributary Sampling Location on Arcade Creek
100 0 100 200 300 Feet

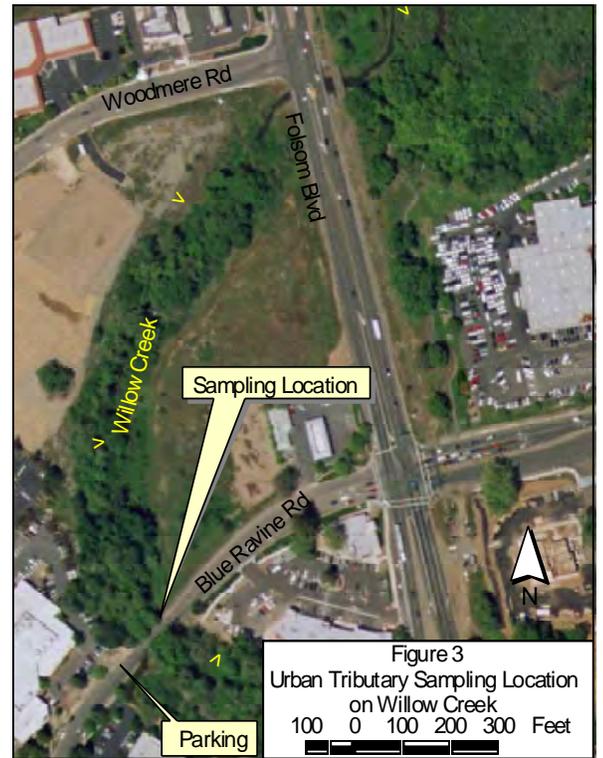


Figure 3
Urban Tributary Sampling Location on Willow Creek
100 0 100 200 300 Feet

River Sites

Cross section composite samples of river water will be collected by the CMP boat crew upstream and downstream of the Sacramento urban area at the following locations:

- Sacramento River
 - Veterans Bridge
 - Freeport Marina
- American River
 - Nimbus Dam (grab samples only)
 - Discovery Park

To the greatest extent possible, samples will be collected in such a manner that the impact of urban runoff from the Sacramento urban area on ambient water quality can be assessed.

SAMPLE COLLECTION SCHEME

The Partnership team will collect samples at the urban tributaries and rivers during two wet weather storm events and one dry weather event twice during the permit term. The Partnership will collect grab samples at the urban tributaries and at the American River at Nimbus Dam and cross sectional composite samples collected directly or through a pump at the three other river locations. The Partnership will target the first wet weather event of the season and one other wet weather event. The Partnership will schedule the dry weather event to coincide with the CMP “P4” schedule, which currently occurs in October, February and June.

Samples collected by other programs will follow their applicable standard operating procedures (see the annually updated *NPDES Monitoring Urban Tributary Sampling & Analysis Plan* and *Coordinated Event Sampling and Analysis Plan: Sacramento Stormwater Monitoring Program*). It is expected that the Partnership team will collect toxicity samples at all locations concurrently with the water column chemistry samples described in these documents.

For urban tributary monitoring, grab samples are collected as close to peak flow as possible. Therefore, to the greatest extent possible, grab samples will be collected during the first portion of the storm event, at a time when flow rates are increasing and precipitation rates are decreasing.

For river monitoring, urban runoff flows peak between one and eight hours after the peak rainfall, and downstream river sites are ideally monitored during this window. In cases where the peak urban runoff flow period has substantially passed, the river field crew should first collect samples at the downstream locations (Discovery Park then Freeport). If river sampling is initiated prior to the peak rainfall intensity, the upstream location samples should be collected first. River sampling can only be performed during daylight hours when conditions are safe. Water column chemistry samples are collected as depth averaged cross-section composite samples from five cross section transect points. Toxicity samples are collected as composites of mid depth samples from the five cross section transect points across the river. At Nimbus samples are collected as a mid-depth or sub-surface grab samples, depending on river and safety conditions.

While the above approaches are preferred for each monitoring program, safety concerns and constraints on the timing of sample collection may make these approaches impractical and other strategies will need to be developed for a given event. Any modifications to the preferred approach should be documented in the field notes

Sample Collection Schedule

The species listed in **Table 1** will be analyzed for wet and dry weather monitoring events **Table 2** outlines the sampling schedule and requirements for the urban tributary and river toxicity sample collection.

Table 1. Monitoring and Reporting Program (MRP) Sampling Requirements for 2009/10 and 2011/12

Chronic Toxicity Test Species	Wet Weather Event No.		Dry Weather Event No.
	1	2	1
Fathead Minnow (<i>Pimephales promelas</i>)	X	X	X
Water Flea (<i>Ceriodaphnia dubia</i>)	X	X	X
Algal growth (<i>Selenastrum capricornutum</i>) [1]	X		

Notes:

[1] During 2011/12 only, follow-up monitoring possible to determine site specific toxicants, as necessary, TIE follow up to be developed prior to 2011/12 monitoring and included in the 2009/10 Joint Annual Report.

Table 2. Sampling Schedule

Type	Sites	No. Sites	Permit Years Monitored	Total Events Over 5 Year Permit Term at Each Site	Species Tested	Notes
Water Column Toxicity	Arcade Creek, Willow Creek and Laguna Creek, Sacramento River (2), American River (2)	7	Years 2 & 4 (2009/10 & 2011/12)	4 Wet, 2 Dry	Fathead Minnow and Water Flea	2 Wet, 1 Dry per year Phase I TIE triggered based on 50% mortality.
Water Column Growth			Year 4 (2011/12)	1 Wet, follow-up possible	<i>Selenastrum capricornutum</i>	TIE process to be developed prior to 2011/12 monitoring

Bottles, Preservation and Method

The Partnership team will collect samples for the urban tributary monitoring events and coordinated river monitoring events as described previously in the Sample Collection Scheme section. Partnership team field crews will label each bottle as outlined in the Sample Labeling and Shipment section on the following page. Partnership team field crews will record collection time, number, river stage, bottle type, and comments on the standard field data sheet. Partnership team field crews will collect five 1-gallon amber glass bottles at each receiving water location and analyzed as specified in **Table 3**.

Additional required constituents, analysis method, and laboratory information for the different levels of coordination with CMP monitoring events are described in the *2008-2009 NPDES Monitoring Urban Tributary Sampling & Analysis Plan* and the *Coordinated Event Sampling and Analysis Plan: 2008/2009 Sacramento Stormwater Monitoring Program*.

Table 3. Volumes, Lab, Toxicity Test Method, Type, and Preservation by Sample Bottle for MRP

Bottle	Lab	Analysis	Optimum Volume	Method	Sample Type	Preservation
5 X 1 Gallon Amber Glass [2]	Pacific EcoRisk	7 day chronic toxicity	5 Gallon [2]	EPA 821-R-02-013 (U.S. EPA 2002, 4th Edition) [1]	grab or composite	Cool to 0-6°C
5 X 1 Gallon Amber Glass [3]		96 hr population growth	5 Gallon [3]			

Notes:

- [1] Chronic method used for initial sample and when 100% mortality occurs within 24 hours of test initiation. Phase I TIE work will use the equivalent acute method (EPA 821-R-02-012, U.S. EPA 2002, 5th Edition) unless the sample toxicity occurs near to or after the acute test period (72 hours). This methods prescribes distinct method procedures for each species (e.g, EPA 821-R-02-013 has EPA 1000.0 for fathead minnows, EPA 1002.0 for water flea and EPA 1003.0 for algae). The chain of custody form should specify immediate notification of >50% mortality and triggers for dilution series or TIE follow-up.
- [2] A combined ten gallon sample may be necessary at the discretion and request from the aquatic toxicity laboratory prior to sample collection.
- [3] Analysis requires only one liter of sample, but additional sample is required for TIE and for other species; because algae samples are collected concurrently with other species, ten gallons of sample in total will be collected for events with algae.

Sample Labeling and Shipment

Following collection of each sample, the sample container must be labeled, the chain-of-custody form must be filled out and the sample must be shipped to the appropriate laboratory. These actions are described in more detail in the Sample Splitting and Shipment section of the *2008-2009 NPDES Monitoring Urban Tributary Sampling & Analysis Plan* and Documentation and Shipping Instructions sections of the *Coordinated Event Sampling and Analysis Plan: 2008/2009 Sacramento Stormwater Monitoring Program*.

DOCUMENTATION

- Sample dates, times and requested analyses should be recorded on the Chain of Custody form (COC)
- Retain one copy of the COC
- Enclose the original COC in the plastic bag provided and place in ice chest and tape ice chest closed prior to shipment
- Fax or email a copy of all COCs and field notes to Steve Maricle at LWA (530.753.7030 or stevem@lwa.com)

TRANSPORT TO LAB

Samples will be picked up by the lab or couriered directly to Pacific EcoRisk. Toxicity samples should be delivered as soon as possible to meet the 24 hour, not to exceed 36 hour, hold time. In advance of collection of these samples, the Partnership monitoring manager will notify Pacific EcoRisk so that media can be prepared and test species ordered (fathead minnow) or cultured (*Ceriodaphnia* and *Selenastrum capricornutum*). Wet weather events can occur on weekends and during non-business hours. Because the toxicity test method specifies strict test species age and conditions, the test species must be ordered or cultured at or near to the sample collection time. In most cases, test initiation before the hold time expires is possible, however, for an event sampled on a Saturday, fathead minnows within the method parameters would not be available until the following Tuesday. In lieu of waiting for the test species, the lab could use test species that did not meet the method requirements. It is preferred for this project to wait for test species within the method requirements and exceed the method hold time requirements; all tests will be initiated within two *business* days of sample collection.

The Pacific EcoRisk contact information is:

Pacific EcoRisk

Stephen L. Clark
2250 Cordelia Road
Fairfield, CA 94534
(707) 207-7766
slclark@pacificecorisk.com

Alternate Pacific EcoRisk contact:

Alison Briden
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abriden@pacificecorisk.com

Pesticide Plan

for the

Sacramento Stormwater Quality Partnership

As Approved April 12, 2006,

by the

Central Valley Regional Water Quality Control Board

Prepared by the Pesticide Plan Team:

Dave Tamayo, County of Sacramento

Delia Garrison, City of Sacramento

Kathy Russick, Russick Environmental

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Attachment 2	Action Item Permit References
Attachment 3	Schedule for Pesticide Plan Implementation

Background

Purpose

This Pesticide Plan is a comprehensive plan with a goal to reduce the discharge of pesticides from municipal stormwater systems to urban creeks within Sacramento County. It establishes additional controls on pesticide applications made by Permittees, and encourages practices by residential and commercial applicators that will reduce the risk of pesticide discharges to urban creeks. The plan describes both actions taken to date and additional steps to control pesticides

Submittal, approval, and implementation of this Pesticide Plan to the Central Valley Regional Water Quality Control Board (Regional Board) fulfills the requirements of Provision 14.b. of the 2002 National Pollutant Discharge Elimination System Permit, Number CAS082597, for Stormwater Discharges from Municipal Separate Storm Sewer Systems, Sacramento County (NPDES Permit). The NPDES Permit was issued to the County of Sacramento and the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, and Sacramento, referred to collectively as the Permittees.

This plan also addresses the provisions relevant to Permittees' discharges of the Regional Board's Resolution No. R5-2003-0148, a Basin Plan Amendment for the Sacramento River and San Joaquin River Basins for the Control of Orchard Pesticide Runoff and Diazinon Runoff into the Sacramento and Feather Rivers. Specifically, the Pesticide Plan does the following :

- meets the submittal requirements established in provision for dischargers in the Basin Plan Amendment (provision #10).
- References recent actions of the United States Environmental Protection Agency (US EPA) requiring withdrawal of most diazinon and chlorpyrifos products from the urban market, that are expected to result in achievement of the water quality objectives established in the Basin Plan Amendment.

Key Regulations

Under the Federal Clean Water Act, local governments of large urban areas, including Sacramento, are issued permits that require them to control the discharge of pollutants in their stormwater runoff. Urban stormwater runoff carries a significant load of various pollutants to receiving waters. The NPDES Permit requires the Permittees to control the discharge of pollutants to receiving waters from their stormwater conveyance systems to the maximum extent practicable. Section 14b of the NPDES Permit establishes a number of requirements to address pesticides.

The NPDES Permit requirements relate to the Permittees' own pesticide use and to activities designed to track and influence the pesticide use of others. State and federal pesticide laws and regulation put significant limits on the ability of local agencies, such as the Permittees, to control the pesticide use of others. State and federal pesticide regulations are discussed throughout this document where necessary to provide background information.

Recent regulatory actions by the US EPA Office of Pesticides have resulted in removal from the market of almost all diazinon and chlorpyrifos products that are registered for urban uses. Although it is still allowed to these products if they were purchased before they were removed from the market, US EPA's actions are expected to reduce diazinon and chlorpyrifos concentrations in urban discharges to acceptable levels as existing supplies are depleted over time.

Pesticides as a Target Pollutant

The Permittees recognized in 1995 that the pesticides diazinon and chlorpyrifos are present in toxic levels in stormwater discharges. Since then, they have been proactively addressing this problem.

The Permittees created a Target Pollutant Ranking System¹ to identify and prioritize the most important stormwater pollutants (target pollutants), to facilitate effective use of their limited resources. The Target Pollutant Ranking System identifies target pollutants using data collected through the Permittees' monitoring program and through monitoring conducted by other agencies. Pollutants are ranked in a weighted scoring scheme that considers such factors as the frequency and severity of pollutant occurrence, the potential to exceed water quality criteria, and the potential to adversely affect beneficial uses.

From 1993-1995 aquatic toxicity studies conducted by the Permittees and Regional Board identified toxicity in urban creeks caused by organophosphorous (OP) pesticides. Ongoing chemical analysis confirms that two OP pesticides, diazinon and chlorpyrifos, are generally detectable in Sacramento area urban runoff, often at levels which would be expected to be toxic to aquatic arthropods, organisms near the base of the food chain.

Based on the observed toxicity and frequent occurrence of these pesticides, the Target Pollutant Ranking System ranked diazinon and chlorpyrifos as the most important pollutants in Sacramento area stormwater discharges. Soon after, other stormwater programs and sanitary sewer agencies in the Bay Area and Central Valley also identified them as problem constituents in their discharges.

Once a pollutant is identified as a high priority Target Pollutant, the Permittees develop strategies to reduce its discharge in urban runoff. The Permittees and other stakeholders recognized early that it was important to address pollution from pesticides in general, not just from diazinon and chlorpyrifos. Focusing on the latter was likely to result in pesticide users switching to other pesticides that could still cause toxicity in the urban creeks and POTW discharges. According to a U.S. Geological Survey report, *The Quality of Our Nations Waters: Nutrients and Pesticides*, the most frequently detected pesticides in our waters are those most heavily used.

Since the identification of diazinon and chlorpyrifos as target pollutants, the U.S. Environmental Protection Agency has severely restricted their use due to their environmental and human health risks. Retail sales for most urban uses of chlorpyrifos were phased out in 2001, and retail sales for most urban uses of diazinon are scheduled for phase out by the end of 2004. However, pesticides in general remain a target pollutant for the reasons discussed above. In addition, people who bought over-the-counter products containing diazinon or chlorpyrifos before the phase-out are still allowed to use them.

Pesticide Users

In urban areas, pesticide users include:

- Residents
- Institutional Users: Commercial facilities and public agencies whose owners or employees apply pesticides in the course of their duties, but not on a for-hire basis
- Pest Control Operators (PCOs): Companies or individuals who apply pesticides as part of pest control businesses that provide pest control on a for-hire basis

Licensing and training requirements differ between these groups.

- Residents are not required to have any training or licensing for the use of pesticides available to them.

¹ A detailed description of this system may be found in the 2003 Sacramento County Stormwater Quality Improvement Plan.

- Employees who apply pesticides for institutional users must have training and some are subject to licensing requirements.
- PCO employees who apply pesticides must receive training. All PCO applications must be conducted by or under the supervision of a person licensed or certified by DPR or the State Structural Pest Control Board.

Studies conducted in Northern California² suggest that pesticide applications made by private residents may be responsible for approximately one-half of the pesticides applied in urban areas, accounting for tens of thousands of pounds of active ingredients. These studies also indicate that the large volume of pesticides applied in urban areas by both residents and PCOs could account for the observed levels of pesticide contamination of stormwater, even if the pesticides are legally applied. Finally, improper pesticide handling, application, and disposal by residents are also likely sources of pesticide levels in urban runoff. No training is required for residents to purchase or apply the pesticides that are available to them. Although they are required by law to follow pesticide label instructions, properly dispose of unwanted pesticides, and avoid applications that cause water pollution, private residents who use pesticides are subject to virtually no oversight.

Actions/Approach Taken to Date

In 1996, soon after diazinon and chlorpyrifos were identified as target pollutants, the Permittees, other stormwater programs, sanitary sewer agencies, and other stakeholders, such as the Central Valley and San Francisco Bay Regional Boards, the California Department of Pesticide Regulation, and manufacturers of diazinon and chlorpyrifos, formed a group to address pesticide issues. Now known as the Urban Pesticide Committee (UPC), the group still serves as a forum for discussion, sharing information, and developing cooperative efforts to address pesticides.

The Permittees and UPC recognized that it is not enough to raise awareness about pesticide risks, because people need solutions to pest problems. There was consensus that the best way to minimize the water quality risks associated with pesticides was to promote Integrated Pest Management (IPM), which is a strategy for making pest management decisions that often leads to reduced pesticide use. The University of California Statewide Integrated Pest Management Program (UCIPM) defines IPM as follows:

Integrated pest management (IPM) is an ecosystem-based strategy that focuses on long-term prevention of pests or their damage through a combination of techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of removing only the target organism. Pest control materials are selected and applied in a manner that minimizes risks to human health, beneficial and non-target organisms, and the environment.

The Permittees have worked proactively to promote IPM and reduce pesticides in urban discharges. Efforts to date include:

- Monitoring for pesticides and toxicity in urban runoff since 1995
- Pesticide monitoring study and pesticide outreach program funded by CalFed grant
- Implementation of the Water Wise pesticide outreach program since 2000
- Education and outreach to PCOs
- Support of household hazardous waste programs
- Pesticide use surveys

² (a) Alameda County Urban Runoff Clean Water Program, 1997. Characterization of the Presence and Source of Diazinon in the Castro Valley Creek Watershed. Prepared by J. Scanlin and A. Feng

(b) Regional Water Quality Control Plant-Palo Alto, 1996. Diazinon in Urban Areas. Prepared by A. Cooper.

- Participation in regional and watershed level pesticide control groups such as the UPC
- Tracking and participation in the pesticide regulation process
- Participation in Pesticide Research and Identification of Source, and Mitigation (PRISM) grant from the State entitled “Making IPM Mainstream: Tools and Market-Based Incentives for Restoring Pesticide-Contaminated Waterways”

The Pesticide Plan Control Strategies

Overview

The Pesticide Plan:

- Builds on numerous existing efforts
- Establishes new activities where necessary to meet the requirements of the MS4 Permit
- Involves numerous partners
- Targets the primary pesticide users
- Addresses all pesticide use, not just diazinon and chlorpyrifos
- Promotes integrated pest management as a way to reduce water quality impacts from pest control
- Recognizes the need for significant changes in pesticide regulations and recommends specific changes to better protect water quality

The plan identifies action items to address the NPDES Permit requirements as well as action items that are not specifically required but that improve the Plan's overall effectiveness and cohesiveness. It is organized into five categories: Permittee Pest Control, Public Outreach and Education, Pest Control Operators, Evaluation, and Regulatory.

Attachments 1 and 2 summarize the relationship between the NPDES Permit requirements and their associated action items.

Attachment 3 shows the proposed implementation schedule for the action items.

The following lists the Pesticide Plan categories and their associated Action Items.

Permittee Pest Control — Activities by the Permittees to manage their own pesticide use

- Action Item 1: Develop and establish authority to implement pesticide plan
- Action Item 2: Develop a "tool box" for the Pesticide Plan.
- Action Item 3: Document and report pesticide use.
- Action Item 4: Review and revise internal policies and procedures to ensure documentation of pesticide use.
- Action Item 5: Require oversight by Certified Pesticide Applicator.
- Action Item 6: Establish/conduct training program for pesticide applicators.
- Action Item 7: Develop and adopt Permittee-specific IPM policies, procedures, or ordinances.
- Action Item 8: Ensure coverage under Aquatic Pesticide Permit.
- Action Item 9: Coordinate with Sacramento-Yolo Mosquito and Vector Control District

Public Outreach and Education — Outreach to the public and pesticide retailers, encouraging IPM and proper use and disposal of pesticides.

- Action Item 10: Continue to support local IPM outreach and education programs, such as Water Wise Program and Our Water Our World.
- Action Item 11: Continue to support Household Hazardous Waste programs.
- Action Item 12: Continue to include pesticide information in stormwater outreach campaign.

Action Item 13: Encourage incorporation of IPM in design of new development landscaping and buildings.

Action Item 14: Promote implementation of IPM by Institutional Pesticide Users.

Action Item 15: Consider other IPM outreach efforts.

Pest Control Operators — Activities related to Pest Control Operators.

Action Item 16: Continue regulation by the County Agricultural Commissioner.

Action Item 17: Continue to enforce local prohibitions against illegal discharges.

Action Item 18: Promote IPM implementation by PCOs.

Pesticide Assessment Activities — Activities to evaluate pesticide levels in the environment, pesticide use, and disposal practices.

Action Item 19: Continue conducting water quality monitoring.

Action Item 20: Continue to track relevant monitoring programs by other agencies.

Action Item 21: Conduct Residential Pesticide Sales and Use Surveys.

Action Item 22: Evaluate PCO pesticide use data.

Action Item 23: Continue evaluating program progress and effectiveness.

Action Item 24: Evaluate target pollutants.

State and Federal Regulatory issues — Activities to affect regulations that apply to pesticide use and impacts.

Action Item 25: Continue tracking and commenting as appropriate on State and Federal regulatory activities that pertain to pesticides of significance to urban stormwater discharges.

Action Item 26: Continue providing input for pesticide product risk assessments for surface water quality.

Action Item 27: Continue participating in the development of TMDL for pesticides in Sacramento urban creeks.

Action Item 28: Continue supporting improvements in State and Federal pesticide regulations.

Permittee Pest Control

The Permittees use pesticides in the process of providing municipal services. The extent and nature of pesticide use varies considerably among them, and may include uses for rights of way, structures, landscapes and parks, sewers, and drainage facilities.

When using pesticides, the Permittees are subject to State and Federal pesticide regulations, which are separate from the MS4 Permit, and include requirements for training, licensing, pesticide use, record keeping, and reporting. The NPDES Permit includes some pesticide use requirements that are the same or consistent with state and federal requirements. It also requires the Permittees to conduct additional reporting and training and to use integrated pest management (IPM). Therefore, meeting the NPDES Permit requirements will require additional effort by the Permittees. As appropriate, the existing pesticide requirements will be incorporated into the IPM programs established as part of this plan.

Action Item 1. Develop and establish authority to implement Pesticide Plan.

Each Permittee will establish a policy, ordinance, or similar instrument that requires all pesticide management activities by its staff and contractors to be in compliance with the NPDES Permit requirements, the Pesticide Plan and the Permittee's internal pesticide use policies, including IPM.

Action Item 2. Develop a "tool box" for the Pesticide Plan.

The Permittees will jointly conduct background research--including a review of basic IPM information and of other municipal IPM programs--to develop a tool box of resources to help the Permittees develop and implement the Pesticide Plan and IPM. The tool box might include:

- Model policies and ordinances
- Model PCO contract language
- Pest management decision tools
- Pesticide evaluation methods and tools
- Reporting and documentation forms and software
- IPM fact sheets for common pests
- IPM books and other documents
- Other IPM resources such as websites
- Training materials and opportunities
- Model IPM contract language
- Lists of IPM consultants and PCOs

Pesticide Use Inventories

The NPDES Permit requires the Permittees to inventory their pesticide uses. By meeting this requirement, the Permittees will ensure they have an accurate, up-to-date understanding and documentation of their pesticide use. To the extent practical, this inventory will build on existing State Pesticide Use Reporting (PUR) requirements. Most pesticide applications by the Permittees are probably subject to the PUR requirements.

PUR requirements apply to the following Permittee actions:

- Application of any restricted material
- Application of any agricultural chemical
- Outdoor application of chemicals with the potential to pollute groundwater
- Pesticide applications to parks, golf courses, roadside ditches, and creeks and channels

PUR requirements also apply to any applications made by PCO vendors, including pest control services provided to the Permittees.

The PUR requirements may not apply to all pesticide applications by Permittee staff on Permittee property. For example, an application of a non-restricted pesticide by staff for structural purposes, such as cockroach control, would not be subject to PUR requirements.

The plan includes the following action to meet the NPDES Permit pesticide use inventory requirements:

Action Item 3. Document and report pesticide use.

Annually each Permittee will complete its pesticide use inventory, covering a representative time frame. Beginning in 2006, the Permittees will complete pesticide use inventories for the previous calendar year. Completion of the inventory will include:

- a. Survey internal departments to identify all pesticide applications made by Permittee staff, on Permittee property, or on behalf of the Permittees by vendors
- b. Compile pesticide use reports for pesticide applications made by Permittee staff
- c. Compile pesticide use reports for pesticide applications made by PCOs or vector control districts on Permittee property or on behalf of the Permittees
- d. Collect information on pesticide applications made by Permittee staff that is not subject to PUR requirements
- e. Combine all PUR and non-PUR pesticide use information in an appropriate useful format. The Permittees will consider establishing databases that coordinate the PUR requirements with the documentation requirements established by the MS4 Permit. For instance, Santa Clara County has a web-based software application that meets both the PUR and MS4 requirements, streamlines pesticide use reporting and documentation procedures, and provides timely information in a format useful for the IPM Program.

Action Item 4. Review and revise internal policies and procedures to ensure documentation of pesticide use.

The Permittees will conduct the following activities:

- f. Consult with the Agricultural Commissioner to ensure that identified Permittee-associated pesticide uses comply with applicable PUR requirements
- g. Require PCO vendors to provide data directly to Permittees regarding pesticide applications made under contract to the Permittees
- h. For pesticide uses that are not subject to PUR requirements, develop internal policies and procedures as necessary to ensure reporting and documentation in compliance with the MS4 Permit

Pesticide Use Training and Certification

The NPDES Permit certification and training requirements are more stringent than those of the state pesticide regulations. The Permittees will comply through the following two action items:

Action Item 5. Require Oversight by Certified Pesticide Applicator.

The Permittees will require all Permittee pesticide use to be conducted by, or under the supervision of, a person holding a Qualified Applicator License or Qualified Applicator Certificate, in the category appropriate for the application. (State pesticide regulations currently require some but not all of the Permittee's pesticide uses to be supervised by certificate or license holders.)

Action Item 6. Establish/conduct training program for pesticide applicators.

The Permittees will:

- a. Establish a written training program for all staff that apply pesticides
- i. Conduct the pesticide applicator training at least annually
- j. Ensure training is consistent with and coordinated with the pesticide worker training requirements and NPDES Permit requirements. The training will include:
 - Worker and public safety
 - Proper use and disposal of pesticides
 - Pesticide related surface water toxicity
 - Less toxic methods of pest prevention and control
 - Integrated pest management policy and procedures

Permittee Integrated Pest Management

A number of the NPDES Permit requirements are appropriate to address through IPM. Each Permittee will adopt IPM policies and procedures that apply to all of its pest management activities, including those conducted on its behalf by contractors. Each Permittee is responsible for its own IPM implementation, but the Permittees plan to work together to conduct background research, and to develop the basic framework and information resources for jurisdiction-specific IPM. They may also choose to combine resources for certain activities such as training, data management, and IPM consultant services.

Specifically, the Permittees will:

Action Item 7. Develop and adopt Permittee-specific IPM policies, procedures, or ordinances.

Two years after plan adoption by the Board each Permittee will have adopted in-house IPM policies, procedures, or ordinances specific to its own operations, in coordination with Action Item 1. The Permittees will draw on joint background research (see Action Item 2), and, as necessary, IPM experts will be consulted to develop, review, refine, or implement IPM Program elements.

The success of integrated pest management depends on the awareness and support of various stakeholders. Depending on the needs of their internal organization, the Permittees may find it advantageous to conduct stakeholder processes to develop their internal IPM policies, procedures, or ordinances. Potential stakeholders include PCO service providers, staff and management involved in pest management, internal and external customers, other urban pesticide users such as vector control districts, and the general public.

Permittee IPM activities will include the following elements. As appropriate, these may be coordinated with related activities included in other sections of the Pesticide Plan:

- a. **Authority.** In coordination with Action Item 1, each Permittee will establish written policies, procedures, or ordinances to support implementation of IPM.
- k. **Definition of IPM.** Each Permittee will establish an in-house definition of IPM that is consistent with generally accepted standards of Integrated Pest Management.
- l. **Pest management decision and documentation procedures.** Each Permittee will develop written guidance and procedures for making and documenting pest management decisions, including selection and use of pesticides.

- m. **Requirements for pest management vendors.** PCO and Pest Control Advisor vendors will be required to implement IPM while providing services to Permittees, using the following mechanisms:
- Internal mechanisms such as purchasing policies or standard contract provisions that require IPM implementation by PCOs and PCAs while performing work under contract with the Permittees
 - Requirements for IPM certification of vendors once a practical and bona fide certification system becomes available in the Sacramento Region
- n. **Written IPM training plan.** In coordination with Action Item 3, each Permittee will establish a written training plan to ensure that staff has the necessary knowledge to implement IPM. At a minimum, the training plan will identify training requirements for all staff involved in pest management, set an annual training schedule, and establish a mechanism to ensure that training requirements are met. Staff to be trained includes pesticide applicators, field supervisors, project managers (fiscal managers), facility managers, and IPM coordinators (if any). The training provided may vary depending on specific roles, responsibilities, and activities.
- As participants in a PRISM Grant entitled “Making IPM Mainstream”, once a contract is established and funding is secure, the Permittees will benefit from IPM training for appropriate managers and staff, as described in Task 6 of the grant. In addition, the Permittees will benefit from the establishment of an regional infrastructure for providing ongoing IPM training for public agency staff, as described in Tasks 4 and 5 of the grant.
- o. **Inter-agency agreements for sharing IPM responsibilities.** The IPM Program will document agreements, if any, made among Permittees for joint implementation of all or portions of the IPM Program.
- p. **Coordination with the Agricultural Commissioner.** Representatives of the Permittees and the Agricultural Commissioner will meet on a periodic basis to share information on integrated pest management activities, and coordinate their activities as appropriate.

Action Item 8. Ensure coverage under Aquatic Pesticide Permit.

The Permittees will determine if any of their pesticide applications are subject to the State General Permit for Aquatic Pesticides, and obtain coverage as necessary. Compliance with this permit is consistent with integrated pest management principles.

Action Item 9. Coordinate with Sacramento-Yolo Mosquito and Vector Control District

The Sacramento-Yolo Mosquito and Vector Control District (District) is a separate special district that provides control of mosquitoes and other vectors throughout Sacramento and Yolo County, including all the territory within the jurisdiction of the Permittees. The District is committed to reducing the need to use pesticides and other resources for mosquito control, using the principles of integrated pest management. The District has a policy of working with its customers, which includes the Permittees, to reduce standing water that generates mosquitoes. The District provides free consultation to evaluate drainage facilities and will make recommendations to the Permittees as necessary for improving operation, maintenance, and design to reduce mosquito populations and the need to use pesticides. Especially in light of the arrival of West Nile Virus in California, the Permittees will work with the District to adequately control mosquitoes in drainage facilities using water management techniques applied to drainage operation and maintenance procedures, where practical. This may reduce the chances of the District applying pesticides that could impact receiving waters.

Public/Retailer Outreach and Education

As explained in the background section of this document, the general public is likely responsible for applying about half of the pesticides applied in urban areas. In addition, a significant proportion of applications by PCOs are done on behalf of the general public. Due to the widespread use of pesticides by the public, education is a critical component in reducing discharges of pesticides in urban runoff. Since the public obtains information on pesticide use through retailers, outreach to retailers is integral to public outreach efforts. The Permittees will continue to conduct outreach to the public through the following action items.

Action Item 10. Continue to support local IPM outreach and education programs, such as Water Wise Program and Our Water Our World.

The Permittees will continue to support the Water Wise Program and Our Water Our World, or equivalent pesticide outreach and education programs to promote implementation of IPM by the public.

The Water Wise Program is a joint project supported by all the Permittees and the Sacramento Regional County Sanitation District, that was started in 2000. The Water Wise Program currently provides information about IPM and pesticide use and disposal to the public through:

- Distribution of printed materials at retail pesticide supply locations such as nurseries and home centers
- The Water Wise Program web site, which is accessible through the City and County of Sacramento's stormwater program websites
- The UC Cooperative Extension Master Gardener Program that provides IPM technical support to the public, and conducts community outreach to promote IPM.

Water Wise Program written materials and Master Gardener training were developed by the UC IPM program to ensure credibility and technical accuracy.

The Permittees and SRCSD are also implementing the Our Water Our World (OWOW) IPM outreach program at the Orchard Supply Hardware (OSH) stores in the Sacramento area. OWOW was initiated in the Bay Area, and is similar in concept to Water Wise. At the request of OWOW coordinators, the Permittees chose to support OWOW at Sacramento OSH stores, as part of effort to provide the OWOW program in all OSH stores throughout the state. OWOW includes the following components

- public education materials on display in the stores and
- training for the store employees on the use of least toxic pesticide alternatives.
- The OWOW website, at ourwaterourworld.org.

Data received through the residential pesticide use and sales surveys conducted through Action Item 21 will be reviewed. Permittee outreach messages will be modified to address relevant information received through these surveys. Using information from the surveys, the Permittees will identify the most significant retail pesticide sources that are not already participating in Water Wise or Our Water Our World, and annually offer public outreach materials and staff training to those stores.

Action Item 11. Continue to support Household Hazardous Waste programs.

Unwanted pesticides may enter receiving waters through the storm drains or sanitary sewer if improperly disposed of. To facilitate safe and proper disposal of unwanted pesticides the County and City of Sacramento make Household Hazardous Waste (HHW) disposal services available

free of charge to all residents of the County, including the residents of Citrus Heights, Elk Grove, and Rancho Cordova, which do not currently operate separate HHW services.

Table 1 shows the location and availability of HHW services provided by the Permittees as of April 2004.

Table 1. Household Hazardous Waste Services in Sacramento County

Operator	Location	Hours	Population served
County of Sacramento	North Area Recovery Station 4450 Roseville Rd North Highlands	8:30-4:00 Tues-Sun	Any County resident
City of Sacramento	Sacramento Recycling & Transfer Station 8491 Fruitridge Rd. Sacramento	8:00-5:00 Friday and Saturday	Any County resident
City of Folsom	Home pick up	Monthly by appointment,	Folsom residents
City of Galt	Home pick up	Annual	Galt residents

The Permittees will continue to promote HHW programs through outlets such as print media advertising, printed brochures, utility bill inserts, Permittee web sites, broadcast public service announcements, and the Water Wise Program.

Action Item 12. Continue to include pesticide information in stormwater outreach campaign.

The Permittees will continue to include messages about pesticide impacts and IPM in their outreach campaign.

Data received through the residential pesticide use and sales surveys conducted through Action Item 21 will be reviewed. Permittee outreach messages will be modified as appropriate to improve targeting of priority audiences identified through these surveys.

Action Item 13. Encourage incorporation of IPM in design of new development landscaping and buildings.

- a. The Permittees will conduct or support periodic IPM training sessions for Permittee staff involved in planning and environmental review, landscape design professionals, and other members of the development community.
- b. Some of the Permittees will participate in the EcoLandscape Working Group (ELWG), which organized the 2004 and 2005 EcoLandscape seminars held in Sacramento. ELWG will continue to develop opportunities to help the landscaping industry to adopt integrated pest management and other ecologically sustainable practices. Information on the activities of ELWG are available at www.ecolandscape.org.
- c. The Permittees will continue supporting, developing, and distributing information, reference materials, guidance, and model policies on landscape IPM design concepts for staff and the development community. Currently, the Permittees provide information to local landscapers and residents about the incorporation of IPM in new landscape or re-landscape designs through the Master Gardeners, Water Wise and Our Water Our World.

- d. The Permittees are funding a revision of the successful Bay Friendly Landscaping. This publication, an eco-friendly landscape guideline manual for use by landscape professionals, residents and nurseries, will be adapted to be specific to the Sacramento region. The manual includes IPM concepts as one of its guiding principles. The Permittees will distribute these manuals once they become available.
- e. The Permittees will provide guidance and educational materials or adopt standards where appropriate, that promote integrated pest management in landscape design, as part of the development review process.

Action Item 14. Promote implementation of IPM by Institutional Pesticide Users.

For the purposes of this Pesticide Plan, institutional users are defined as commercial and government entities whose staff apply pesticides in support of the organization's broader business activity, but not on a for-hire basis. For the purposes of this Pesticide Plan, institutional use does not include pesticide use by Permittee staff. Permittee pesticide application is addressed in the sections of this Plan entitled Permittee Pest Control and Permittee Integrated Pest Management.

Examples of institutional users include the following:

- Private golf courses
- Nurseries
- Cemeteries
- Special districts, such as park and community services districts
- School Districts
- Commercial office parks
- Homeowner associations

The Permittees are pre-empted by State law from regulating pesticide use or requiring institutional users to implement IPM. However, the Permittees will promote IPM implementation and outreach among institutional users through the following:

- a. IPM outreach to institutional users, and to pest control vendors who serve them.
- b. Development of an IPM certification program, as described in Action Item 18. This will improve access to IPM services.
- c. As appropriate, make IPM training events for Permittee staff, and other information resources developed for Permittee use, available to institutional users. The IPM Toolkit, described in Action Item 2, is an example of a resource that will be shared with institutional users.
- d. Support and promote efforts by other groups, such as the UCIPM program, Pest Control Operators of California, and Pesticide Applicators Professional Association (PAPA), that provide continuing education workshops and trainings for institutional users.

Action Item 15. Consider other IPM outreach efforts.

The Permittees have an active Stormwater Program public education and outreach program. A wide variety of partnerships and activities for stormwater education and outreach have already been developed with libraries, schools, zoos, and other organizations. The Permittees will

continue to explore opportunities to expand public access to integrated pest management resources through these groups.

Examples that might be considered include the following:

- Provide materials or presentations to environmental horticulture classes
- Provide IPM reference materials to public libraries and schools
- Support displays with an IPM message at local zoos
- Supporting IPM projects through grants to community organizations
- Encourage private owners of business property, including owners of facilities leased by the Permittees, to implement integrated pest management in their facility management

Pest Control Operators and Institutional Users

Pest Control Operators (PCOs) are individuals or companies licensed by the State to provide pest control services on a for-hire basis. State licensing is the primary mechanism for ensuring that PCOs meet an adequate level of training, competence, and regulatory compliance. PCOs may have employees who apply pesticides but are not licensed. However, all applications by PCO employees must be made under the supervision of a person holding a valid State license. License renewal is required on a regular basis and includes continuing education requirements. The California Department of Pesticide Regulation issues licenses for agricultural (including landscape) application. The Structural Pest Control Board issues licenses for control of pests associated with buildings and other structures. Through authority granted by the California Food and Agriculture Code the County Agricultural Commissioner provides local regulation of PCO activities. Under State law other local agencies such as stormwater programs are prohibited from regulating pesticide use by PCOs.

Institutional Users are defined in Action Item 14 as businesses and government agencies that use pesticides. In addition to the outreach efforts listed under Action Item 14, they are subject to regulation as described in Action Items 16 and 17 below.

Action Item 16. Continue regulation by the County Agricultural Commissioner.

The County Agricultural Commissioner will continue to administer and enforce state pesticide use regulations within Sacramento County.

Action Item 17. Continue to enforce local prohibitions against illegal discharges.

Although the Permittees are not authorized to regulate pesticide use by others, the Permittees will enforce stormwater ordinance provisions against discovered illegal discharges of pesticides to the storm drain. Such discharges might result from improper applications, or disposal of pesticides, rinse waters, and wastewater from equipment washing. Such enforcement will be conducted in coordination with the Agricultural Commissioner to avoid regulatory conflicts and promote efficient use of resources.

As discussed in Action Item 19, the Permittees will evaluate exceedances of pesticide water quality objectives in receiving waters to identify watersheds where illegal discharges may be occurring. When exceedances occur, as part of the Report of Water Quality Exceedance process, the Permittees will evaluate information on the pesticide use by institutional users located within the watershed to determine if they are reasonably likely to be a significant source of the pesticide in exceedance. If an institutional user is determined to be a likely significant source, then the Permittee with appropriate jurisdiction will conduct a more focused investigation to determine if there is a violation of the applicable Stormwater Ordinance. Violations of the Stormwater Ordinance will be subject to enforcement, in coordination with the Agricultural Commissioner.

Action Item 18. Promote IPM implementation by PCOs.

The Permittees will conduct the following activities to promote IPM implementation by PCOs:

- a. **Continue outreach to PCOs.** The Permittees will continue conducting PCO outreach to raise their awareness of water quality problems caused by urban pesticide use and to encourage use of IPM. To date the Permittees have supported outreach to PCOs promoting IPM in the Sacramento Region conducted by the Coalition for Urban/Rural Environmental Stewardship (CURES). Additional outreach to PCOs will be conducted on a periodic basis in coordination with the Industrial Element of the Stormwater Program.

- b. **Promote IPM certification programs.** The Permittees are participants in a Pesticide Research and Identification of Source and Mitigation (PRISM) grant from the State Water Resources Control Board entitled “Making IPM Mainstream: Tools and Market-Based Incentives for Restoring Pesticide-Contaminated Waterways.”² Through this grant the Permittees are working to create an IPM certification program that will facilitate selection of PCOs certified in IPM. This project was selected for funding at \$785,000. Funding is anticipated for fiscal year 2004/2005. The project was developed jointly as a regional project by the Bio-Integral Research Center (BIRC), various environmental consultants, the Sacramento Stormwater Program, the Natural Resources Defense Council, and the Association of Bay Area Governments (ABAG), and represents a major effort to promote IPM in the urban environment. The project will provide IPM training for Permittee and other local public agency managers; will market IPM to the public and PCOs, and will create an IPM training and certification program for PCOs in the San Francisco Bay Area and Sacramento region.

As opportunities arise, the Permittees will consider and may support other regional and statewide efforts to establish IPM certification programs for PCOs. As appropriate, the Permittees will also support the development of water quality and IPM education requirements in State licensing procedures for PCOs.

- e. **Facilitate IPM training opportunities.** The Permittees will facilitate IPM trainings for Sacramento area PCOs in conjunction with the PRISM grant.
- f. **Encourage the public to choose PCOs that practice IPM.** The Permittees will encourage the public to choose PCOs that practice IPM through media campaigns and through the existing Clean Water Business Program (CWBP). The CWBP encourages businesses to implement best management practices (BMPs). The existing CWBP encourages BMPs for landscaping businesses that include integrated pest management and the installation of pest resistant landscaping. The Permittees will consider expanding the CWBP to include PCOs. Their participation as business partners would require the promotion and use of IPM practices

Pesticide Assessment Activities

The assessment activities described in this section provide information that helps define the nature, extent, and sources of the pesticide problem, as well as the effectiveness of the control program. Many of the assessment activities are already conducted as part of the Permittee’s ongoing stormwater programs. A number of the assessment activities are conducted or funded directly by the Permittees. Some are conducted by other entities and the Permittees make use of their data.

The Pesticide Assessment Activities are grouped as follows:

- Water quality monitoring
- Analysis of pesticide use and sales
- Program evaluation

Water Quality Monitoring

The Permittees conduct and fund several ongoing water quality monitoring efforts that provide information on the levels of pesticides in rainwater, urban creeks and other receiving waters. As described previously, the data from these monitoring programs was utilized to identify the high levels of diazinon and chlorpyrifos in local urban creeks.

Action Item 19. Continue conducting water quality monitoring.

The Permittees will conduct the following monitoring to assess the concentration or effects of pesticides in local waterways. Additional information on these monitoring activities is included in the Monitoring section of the Permittees' Stormwater Quality Improvement Plan and the 2002/2003 Annual Report.

- a. Discharge characterization monitoring
- g. River monitoring
- h. Creek monitoring
- i. Bioassessment monitoring
- j. Toxicity monitoring
- k. Additional pesticide monitoring

As required by Section I.B. of the Monitoring and Reporting Program of the MS4 Permit, the Permittees will annually review monitoring data collected through the activities described above. In compliance with the requirements for preparing a Report of Water Quality Exceedance, the Permittees will develop recommendations to improve the monitoring program, BMPs, enforcement program, performance standards and the SQIP as necessary to address water quality exceedances and potential pollutant sources. Revisions to this Pesticide Plan will also be recommended as needed. If a unique source for the exceedances is identified through this process, then further monitoring, outreach or enforcement will be considered. This Action Item will be coordinated with investigations of institutional users conducted under Action Item 17.

Action Item 20. Continue to track relevant monitoring programs by other agencies.

The Permittees will continue to track other monitoring efforts, and participate in California Stormwater Quality Association (CASQA), the Sacramento River Watershed Program, and the Urban Pesticide Committee, which facilitate access to information to a wide variety of monitoring efforts related to pesticide levels in urban stormwater. Monitoring programs that will continue to be tracked include:

- Stormwater agency and regional monitoring in the Bay Area, Southern California, and other Central Valley cities.
- United States Geologic Service monitoring
- Central Valley Regional Board urban TMDL monitoring
- Sacramento River Watershed Program monitoring
- University of California at Berkeley, pyrethroid sediment monitoring

Pesticide use and sales analysis

The NPDES Permit requires the Permittees to evaluate patterns of sale and use of pesticides within their jurisdictions. State pesticide regulations require PCOs to report their pesticide use to the Agricultural Commissioner each month, but do not require reporting of retail pesticide sales or pesticide use by residents.

Action Item 21. Conduct Residential Pesticide Sales and Use Surveys.

The Permittees will complete two residential pesticide sales and use surveys during the term of the NPDES Permit, as required. To optimize their usefulness the design of these surveys will be coordinated with previous pesticide surveys conducted recently in the Sacramento area. The County and the City have each completed surveys that include pesticide use and disposal questions. In 2002, the UCIPM program also conducted a residential pesticide survey in the Arcade Creek watershed, an urban watershed in Sacramento County.

- a. The Permittees will submit the design of their 2004 residential pesticide sales and use survey to the Regional Board by May 1, 2004, as part of the annual Work Plan submittal.

- b. The Permittees will complete the first residential pesticide sales and use survey by December 1, 2004.
- c. The Permittees will submit the design of their 2006 residential pesticide sales and use survey to the Regional Board by May 1, 2006, as part of the annual Work Plan submittal.
- d. The Permittees will complete the second residential pesticide sales and use survey by December 1, 2006.

Data received through the residential pesticide use and sales surveys conducted through Action Item 21 will be reviewed. Permittee outreach programs and messages will be modified and targeted to address relevant information received through these surveys. Changes to outreach programs will be documented in annual reports.

Action Item 22. Evaluate PCO pesticide use data.

The Department of Pesticide Regulation compiles and analyzes pesticide use data reported by PCOs. The Permittees will use the pesticide use summaries provided by DPR to evaluate pesticide use trends among PCOs.

Action Item 23. Continue evaluating program progress and effectiveness.

The Permittees will utilize available sources of information such as pesticide surveys, training records, outreach efforts, and pesticide use reports, to evaluate the progress and effectiveness of the Pesticide Plan. An evaluation of the progress and effectiveness of the Pesticide Plan will be included in the Stormwater Program Annual Report.

Action Item 24. Evaluate Target Pollutants.

As stated in Section 3.5 of their 2003 Stormwater Quality Improvement Plan, the Permittees will conduct a comprehensive review of applicable monitoring data of all the target pollutants once during the permit term. The Permittees will evaluate the relative water-quality impact of various pollutants, including pesticides, as part of the re-evaluation of target pollutant rankings.

Pesticide Registration/Regulation

State law pre-empts local stormwater programs from regulating pesticide sales and use. Regulatory activities by state and federal agencies, especially DPR and the United States Environmental Protection Agency (USEPA), are critical for achieving adequate control of pesticide uses that result in pesticide discharges in stormwater. In particular, pesticide registration and re-registration activities, which are very active areas of pesticide regulation, are especially important because restricting the use of a pesticide may be the most effective way to protect water quality.

The Permittees will continue to work through existing organizations like the UPC to address regulatory issues. The UPC provides a forum in which USEPA and DPR participate and has been valuable in bringing water quality concerns to the attention of state and federal pesticide regulators. Through the UPC partnerships among stormwater programs, regulatory agencies, and other entities can be forged to address pesticide regulatory issues of common interest.

As appropriate, the Permittees will support proposed regulations or legislation designed to reduce pesticide discharges in urban stormwater. This support may take the form of providing information, sending comments, and lobbying legislators. This support may be undertaken by individual agencies, jointly, and/or through organizations such as CASQA and the Bay Area Stormwater Management Agencies Association (BASMAA). CASQA and BASMAA represent a significant number of Stormwater Programs statewide and represent very effective partnerships for influencing state and federal agencies to improve pesticide regulations.

Action Item 25. Continue tracking and commenting as appropriate on State and Federal regulatory activities that pertain to pesticides of significance to urban stormwater discharges.

Much of this activity will be through participation in regional and statewide groups such as UPC, BASMAA, and CASQA. The Permittees will provide comments on regulatory activities as appropriate. A representative of the Permittees serves on CASQA's Pesticide Committee, which will be a primary conduit for commenting on State and Federal pesticide regulations. A representative of the Permittees has also been appointed as a member of DPR's Pest Management for the 21st Century Working Group (PM21), and as an alternate member of DPR's Pest Management Advisory Committee (PMAC).

Action Item 26. Continue providing input for pesticide product risk assessments for surface water quality.

Through UPC, CASQA, and other collaborative groups the Permittees will track pesticide risk assessments made by other stakeholders including Regional Boards, DPR, and USEPA. The Permittees will provide comments as appropriate.

Action Item 27. Continue participating in the development of TMDLs for pesticides in Sacramento urban creeks.

The Permittees will actively participate in the Regional Board's process for developing total maximum daily loads (TMDLs) for diazinon and chlorpyrifos in Sacramento urban creeks. Specifically, the Permittees will attend stakeholder forums, provide comments, and support monitoring efforts, as appropriate. The Permittees also will provide relevant data to the Regional Board through the NPDES Permit reporting procedures.

Action Item 28. Continue supporting improvements in State and Federal pesticide regulations.

The Permittees recognize that local efforts to control pesticides should be augmented by improvements in pesticide regulation at the state and federal level. The Permittees will continue to work with organizations such as the UPC and CASQA to promote improvements in pesticide

regulations. Through DPR's PMAC and PM21 the Permittees will provide input to DPR on what it can do to better address urban pesticide issues, and reduce the problem of pesticide toxicity in urban waterways.

The Permittees support the concepts to improve pesticide regulation that are listed below and suggest that they be adopted by the appropriate state and federal agencies:

- a. **Improve evaluation of water quality impacts.** USEPA Office of Water and USEPA Office of Pesticide Programs should coordinate more closely in evaluating the water quality impacts of pesticides during the registration and re-registration processes.
- b. **Exercise State registration authority to protect water quality.** DPR should deny approval of pesticides for use in California for which water quality impacts are demonstrated.
- c. **Improve product labels.** Pesticide product labels are intended to be enforceable regulatory documents. USEPA and DPR should collaborate to make product labels a more effective tool in preventing degradation of water quality. Recommendations include the following:
 - Clarify wording on labels to make them more easily enforceable
 - Ensure that label language consistently includes restrictions that protect water quality
- l. **Require retailers to provide pesticide education materials at point-of-sale.** DPR should propose legislation that requires retailers to provide and display point-of-sale information designed to encourage IPM, promote proper disposal, and reduce pesticide impacts on water quality.
- m. **Require retailers to report all pesticide sales.** DPR should adopt regulations that require retailers to report pesticide sales. Current methods available to the State and local agencies to estimate pesticide sales are difficult and inaccurate.
- n. **Establish adequate State funding for DPR, County Agricultural Commissioners, public education and water quality monitoring.** DPR, the State Water Resources Control Board, and the Regional Boards should seek legislation that generates adequate funding through a mill tax or other mechanisms to adequately support pesticide regulation and evaluation, monitoring programs, and public education efforts to reduce pesticide discharges and promote IPM.
- a. **Include water quality and IPM components in licensing and certification requirements.** DPR and the State Pest Control Board should develop water quality and IPM education requirements in State licensing and certification requirements for applicator categories with the potential to impact water quality.

SACRAMENTO STORMWATER MANAGEMENT PROGRAM

MERCURY PLAN

Prepared by Archibald & Wallberg Consultants

**Final Draft
April 2004**

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GLOSSARY OF ACRONYMS

BERC	Sacramento County Business Environmental Resource Center
BMP	best management practice
CASQA	California Stormwater Quality Association
CESQG	conditionally exempt small quantity generator
CMP	Coordinated Monitoring Program
County EMD	County of Sacramento Environmental Management Department
DTMC	Delta Tributaries Mercury Council
DTSC	California Department of Toxic Substances Control
HHW	household hazardous waste
MEP	maximum extent practicable
Palo Alto RWQCP The Permit	Palo Alto Regional Water Quality Control Plant NPDES Permit No. CAS0-82597
Regional Board	Central Valley Regional Water Quality Control Board
SCVURPPP	Santa Clara Valley Urban Runoff Pollution Prevention Program
SFEI	San Francisco Estuary Institute
Stormwater Permittees	County of Sacramento and the cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova
Stormwater Program	Sacramento Stormwater Management Program
SRCSD	Sacramento Regional County Sanitation District
SRWP	Sacramento River Watershed Program
TMDL	total maximum daily load
UWR	Universal Waste Rule
USGS	U.S. Geological Survey
WLA	waste load allocation

SACRAMENTO STORMWATER MANAGEMENT PROGRAM

MERCURY PLAN

INTRODUCTION

This document outlines the Sacramento Stormwater Management Program's (Stormwater Program's) strategy to reduce mercury in Sacramento area urban runoff. It also includes background information on mercury pollution in local waters, a summary of key regulations, and a description of related mercury control efforts and studies.

This Mercury Plan was developed in conformance with Provision 14 of the Stormwater Program's 2002 National Pollutant Discharge Elimination System (NPDES) Permit, No. CAS082597 (the permit). The permit requires the County of Sacramento and the cities within county boundaries (the Stormwater permittees) to reduce pollution in Sacramento area urban runoff to the maximum extent practicable (MEP). The permit further requires development of a mercury pollution prevention plan (i.e., this Mercury Plan) and specifies several concepts the plan must address.

In addition to fulfilling the permit requirements, this plan serves as the Stormwater Program's reduction strategy for mercury as a top ranked target pollutant in Sacramento area urban runoff. In 2002, the Stormwater Program identified mercury as a top ranked target pollutant through its ranking procedure that assigns a weighted value to pollutants, based on a number of factors. Mercury received a high ranking primarily because it impairs a beneficial use, namely fisheries, in the Delta and Sacramento River system. [As discussed later, certain fish accumulate levels of mercury that pose a health risk to humans and wildlife that consume those fish.] However, controlling mercury in Sacramento area urban runoff is not by itself likely to measurably improve the fisheries beneficial use, because—as discussed later in this document—Sacramento area urban runoff contributes just an estimated two percent of the mercury load in the Sacramento River at Sacramento.

This Mercury Plan targets potential sources of mercury in urban runoff—sediment (to which mercury can be bound) and mercury-containing products. The Stormwater Program already implements a number of best management practices (BMPs) designed to prevent erosion and remove sediment—and therefore mercury bound to the sediment—from Sacramento urban runoff. The plan incorporates those BMPs. In addition, it adds new BMPs to the Stormwater Program to target the proper disposal and handling of mercury containing products by the Stormwater permittees as well as the Sacramento area industrial, commercial, and residential sectors.

In developing this Mercury Plan, other agencies and programs were contacted and various documents were reviewed to obtain information on activities that would address the requirements of the permit. See Attachment A for the bibliography of documents

reviewed. In addition, information was obtained on mercury containing products used in the urban environment; that information is summarized in Attachment B.

At a later time, this plan may be revised in response to the urban runoff waste load allocations (WLAs) for mercury, which the Central Valley Regional Water Quality Control Board (Regional Board) is currently developing as part of its Total Maximum Daily Load (TMDL) plans for the Delta and Sacramento River (see the section on key regulations). A TMDL sets the total amount of a pollutant, which can be loaded into a receiving water by all sources, that will allow water quality standards to be met in that receiving water. A WLA is the portion of a receiving water's loading capacity that is allocated to one of the sources.

MERCURY POLLUTION IN LOCAL WATERS

Mercury is a naturally occurring substance that is distributed in the environment by both natural processes and human activities. Mercury never breaks down, but can be transformed from one form to another. When it is in the form of methylmercury, mercury readily bioaccumulates within the aquatic food chain. Human exposure to methylmercury generally occurs through consumption of contaminated fish and shellfish and poses health risks; mercury is a potent neurotoxin, a developmental toxin, and a possible human carcinogen. In the Sacramento River system, mercury bioaccumulation within the aquatic food chain has resulted in unhealthy levels of mercury in certain fish species that are consumed by wildlife and by humans. As a result, the fisheries use is considered impaired by mercury in the Sacramento River system and also the Delta.

There are several sources of mercury to the Sacramento River system including:

- Legacy mining.
- Erosion of native sediment.
- Discharges from natural mineral springs.
- Atmospheric deposition.
- Treated wastewater discharges.
- Urban runoff.

By far, the most significant source is legacy mining – historical mercury mining of the Coast Ranges and the use of the mined mercury in gold recovery in the Sierra Nevada Range. In eastside tributaries, pockets of elemental mercury used in gold recovery are still found in stream beds today. As with all mercury that entered/enters the river, the fate of this legacy mercury is affected by key processes within the river system. The distribution of mercury between the water column and riverbed sediment depends on sediment disruption and transport during storms, the sediment settling effect of

reservoirs, and other processes. Once in the water column, the transformation of inert mercury into the bioavailable form, methylmercury, depends upon numerous factors including type and abundance of microorganisms and organic matter, pH, temperature, sulfate concentration, and mercury concentration. The methylation process may be enhanced when the water passes through wetland environments. Legacy mercury and its re-introduction into the water column from riverbed sediment through natural river processes dwarfs the mercury contribution from Sacramento area urban runoff.

However, mercury water quality data from the Sacramento area shows that total mercury levels in Sacramento area urban runoff are higher than in the river system and that Sacramento area urban runoff contributes to the total amount of mercury in the Sacramento River and Delta. For methylmercury, urban runoff levels appear to be about the same as river levels; urban creek levels, however, may be higher. Pertinent data is summarized below:

- Based on Coordinated Monitoring Program (CMP) data collected between 1992 and 2003, the mean value of total mercury in the Sacramento River is 8.5 ng/L at Veteran's Bridge and 9.3 ng/L at Freeport. This indicates some increase in total mercury in the vicinity of the Sacramento urban area. The mean value of methylmercury in the Sacramento River at Veteran's Bridge and at Freeport is 0.1 ng/L, showing no upstream to downstream increase in the vicinity of the Sacramento urban area.
- Based on Sacramento River Watershed Program (SRWP) data collected between 1998 and 2002 for several eastside tributaries, both non-urban (Mill Creek, Deer Creek, Chico Creek) and urban (Arcade Creek), the highest total mercury levels were from non-urban Mill Creek. However, urban Arcade Creek had higher methylmercury levels, with a range of 0.1 to 1.2 ng/L methylmercury.

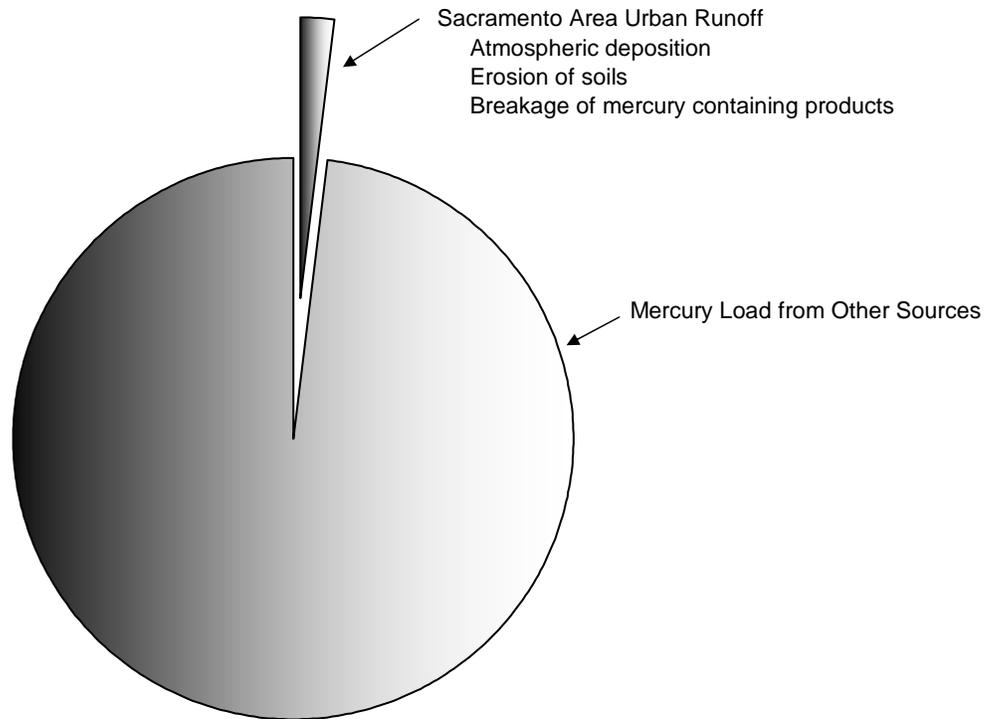
The Sacramento Stormwater Program collected Arcade Creek flow-weighted composite samples during three wet weather and two dry weather events in 2000. Total mercury levels in the wet weather samples ranged from 16.4 to 39.16 ng/L. Total mercury levels in the two dry weather samples were 2.88 and 8.28 ng/L.

- Sacramento Stormwater Program urban runoff mercury data collected in 2002/03 shows total mercury in urban runoff samples from the three long-range sampling locations (Sump 111, Sump 104, and Strong Ranch Slough) to be around 10 to 30 ng/L. Methylmercury concentrations at these locations were around 0.1 ng/L.

The Strategic Plan for the Reduction of Mercury-Related Risk to the Sacramento River Watershed (developed by the Delta Tributaries Mercury Council (DTMC) and the SRWP) estimated the mass load of the mercury discharged from Sacramento area urban runoff versus other sources. Sacramento area urban runoff was estimated (with a 20 percent uncertainty factor) to contribute approximately 4 kg/year (8.8 pounds) of mercury to the river system, which is approximately two percent of the total Sacramento River

load at Sacramento. This percentage contribution, illustrated on Figure 1, is an order of magnitude less than the estimated percent mercury contribution of San Francisco Bay Area urban runoff to San Francisco Bay.

Figure 1. Percent of Sacramento River Mercury Load Attributed to Sacramento Area Urban Runoff



The mercury in Sacramento area urban runoff originates from several sources including:

- Atmospheric emissions and deposition (mercury data on Sacramento dry deposition and rainfall is discussed in the section on air quality studies).
- Naturally occurring mercury in eroded soils.
- Breakage of mercury containing products in the urban area (some portion of which may occur in the outdoor urban environment and thus be transported into the storm drainage system).

From the perspective of the Stormwater Program, atmospheric deposition is a largely uncontrollable source of mercury to urban runoff, and sediment is the most important and manageable source. It is not known to what extent mercury enters stormwater from the improper disposal/breakage of mercury-containing products; however, the control of

mercury-containing products is now being addressed by regulations independent of those governing stormwater management (see the following section on key regulations).

KEY REGULATIONS

The Stormwater Permit

The permit (issued by the Regional Board to the Stormwater permittees per the federal Clean Water Act) governs stormwater management activities to reduce mercury in Sacramento area urban runoff. The permit includes both general and specific requirements applicable to this Mercury Plan.

Permit Provision 14 states that, “....The permittees shall continue or initiate implementation of control programs for pollutants [in stormwater runoff] that have been identified to cause or contribute to exceedances of water quality standards and potential impairment of beneficial uses.....”

According to the permit, control programs must reduce the discharge of pollutants to the MEP. The State Water Resources Control Board’s Senior Counsel has stated that achieving the MEP standard requires a meaningful, rather than a perfunctory program.

In addition, the permit specifies six concepts that this Mercury Plan must address:

- i. Development and adoption of policies, procedures, and/or ordinances to implement the Mercury Plan.
- ii. The reduction, to the maximum extent practicable, of mercury from controllable sources in stormwater, including the identification of mercury-containing products used by the Permittees and a schedule for their control.
- iii. Study the feasibility and benefits to local stormwater quality of residential and commercial programs for diverting mercury-containing waste products (potentially including thermometers and other gauges, batteries, fluorescent and other lamps, switches, relays, sensors and thermostats) from the waste stream.
- iv. Coordination with Regional Board staff, to the extent appropriate, in conducting an assessment of the contribution of air pollution sources to mercury in the Permittees stormwater.
- v. A public education, outreach, and participation program designed to reach residential, commercial, and industrial users or sources of mercury-containing products or emissions.
- vi. Participation with other organizations to develop programs to reduce or eliminate sources of mercury within the Sacramento River watershed.

Mercury TMDL Requirements

Section 303(d) of the federal Clean Water Act requires the Regional Boards to identify impaired water bodies and to then develop TMDL plans to reduce the loads of the pollutant(s) causing the water body to be impaired. The load reduction plans must specify WLAs for the pollutant(s) of concern. For the Delta and Sacramento River the mercury WLA assigned to Sacramento area urban runoff will directly affect stormwater management activities to reduce mercury as the suite of selected mercury reduction activities will need to be sufficient to meet the WLA.

The Regional Board is in the process of developing TMDLs for mercury for both the Delta and for the Sacramento River. The Delta Mercury TMDL is expected to include Sacramento area urban runoff downstream of the I Street Bridge on the Sacramento River, the northern boundary of the Delta. Urban runoff upstream of this point is to be included in the Sacramento River Mercury TMDL. The draft Delta Mercury TMDL is expected in June 2004 (after the submittal date for this Mercury Plan) and the draft Sacramento River Mercury TMDL is expected a year or two later.

The San Francisco Bay Mercury TMDL is the only existing northern California mercury TMDL that addresses urban runoff. Since that may serve as a model for the Sacramento area mercury TMDLs, key items from the San Francisco Bay Mercury TMDL are listed below:

- A simple mass budget model was used in calculating estimated loads.
- The Bay Area urban runoff WLA reduction was set at 50 percent. It is hoped that a 50 percent reduction in controllable sources will achieve an across-the-board 50 percent reduction in fish tissue, bird eggs, sediment, and water.
- The Bay Area urban runoff WLA is to be achieved over 20 years, with a 10 year interim evaluation. The reduction is to be achieved by:
 - Source control of mercury containing products.
 - Sediment removal.
 - Stormwater treatment.Atmospheric deposition inputs are largely considered an uncontrollable source.
- The Bay Area stormwater permittees must quantify expected load reductions to achieve credit towards the 50 percent WLA. BMPs that may provide such reductions are listed as low flow diversions, construction BMPs, new development BMPs, etc.

Key Regulations Related to Mercury-Containing Products

Recent legislative (Senate Bill 633) and regulatory (Universal Waste Rule) efforts have addressed control of mercury containing products. These actions are expected, over time,

to reduce the amount of mercury entering the urban environment from breakage and improper disposal of mercury containing products.

Specifically, Senate Bill 633, the state 2001 Mercury Reduction Act:

- Limits the sale of mercury fever thermometers by prescription.
- Prohibits the sale of mercury containing novelty devices.
- Prohibits schools from purchasing most mercury containing devices.
- Requires the State Department of Toxic Substances Control (DTSC) to provide technical assistance to auto dismantlers to improve removal of mercury containing switches.
- Prohibits the sale of new vehicles with mercury containing light switches.

This legislation will restrict the types of mercury containing products allowed in California and addresses auto dismantler operations, an industrial sector route for mercury to enter the environment. Selected Stormwater Program Commercial/Industrial Element management activities to reduce mercury can benefit from and should be consistent with the DTSC direction to auto dismantlers.

The DTSC Universal Waste Rule (UWR) restricts disposal options for mercury containing products, prohibiting disposal as general solid waste and requiring such products to be handled as hazardous waste after arrival at a recycling facility or a destination facility. Mercury containing products that are defined as universal waste include mercury containing batteries, lamps (fluorescent, high intensity discharge, neon, mercury vapor, high pressure sodium, metal halide), and thermostats. This regulation mandates separating these mercury containing products from the general waste stream and affects all sectors of California society. The Stormwater permittees must comply with the UWR requirements for their own operations, and Stormwater Program public outreach to the residential and commercial/industrial sectors should be consistent with the UWR.

RELATED MERCURY CONTROL EFFORTS AND STUDIES

Delta Tributaries Mercury Council

The DTMC, formed in 1999, is a stakeholder group of regulatory agencies, scientists, and other entities working to develop strategies to reduce mercury in the watershed in the most resource efficient manner. It provides an ongoing forum for the exchange of scientific information and discussion of public policy related to mercury management in the Delta and its tributaries. The Stormwater Program permittees participate in the DTMC.

DTMC activities include review and input into establishing mercury TMDLs in Northern California. To date, these have included the Clear Lake Mercury TMDL and the Cache Creek, Bear Creek, and Harley Gulch Mercury TMDL, neither of which addresses urban runoff. The forthcoming Delta Mercury TMDL and the Sacramento River TMDL will be brought to and discussed by the DTMC. The DTMC also discusses watershed offset projects as a potential way to efficiently use limited resources to control mercury on a watershed basis.

Sacramento Regional County Sanitation District (SRCSD)

The SRCSD is conducting several efforts related to the discharge to the Sacramento River of mercury in its treated wastewater. These efforts include:

- Exploring the feasibility of generating and using pollutant reduction credits for watershed offset projects.
- Source control programs for dental offices and hospitals to reduce the influent mercury load to the Sacramento Regional Wastewater Treatment Plant.
- A thermometer exchange program for the general public (through participating pharmacies) and for universities and schools.
- Public education and outreach on disposal of household mercury containing products and replacement with non-mercury alternatives (featured on a website www.BeMercuryFree.net and through radio ads, articles in the Sacramento Bee Neighbors' section, participation in events such as the Salmon Festival, and utility bill inserts).

The SRCSD Mercury Offset Program is an EPA-recognized pilot project for pollutant trading of persistent bioaccumulative toxic substances. This program is breaking new ground and its long term viability has yet to be established. The feasibility of obtaining pollutant reduction credits for watershed offset projects is of interest to the Stormwater Program for its potential in meeting the forthcoming mercury urban runoff WLA. The Stormwater Program has participated as a stakeholder in the SRCSD offset pilot project and will continue to track this effort.

The Stormwater Program is also interested in SRCSD's public outreach with respect to having regionally consistent outreach and leveraging resources.

Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP)

The SCVURPPP developed a Draft Mercury Pollution Prevention Plan in 2001. The SCVURPPP plan addressed NPDES Permit provisions that were similar to those in the Sacramento permit and is therefore of interest to the Sacramento Stormwater Program. To date, SCVURPPP has undertaken the following to implement its plan:

- Developed guidelines on mercury containing products for use by the Santa Clara permittee agencies.
- Prepared a survey of permittee use, handling, and disposal of such products.
- Developed a model policy on eliminating use of mercury containing products by the permittees.
- Conducted a public outreach media campaign in coordination with local household hazardous waste (HHW) collection centers on proper disposal of mercury containing products by residents.

Outreach to Auto Dismantlers

The nonprofit organization *Sustainable Conservation* is collaborating with the California Auto Dismantlers Association to educate dismantlers on how to remove, store, and dispose of mercury switches in autos. A mercury switch removal pilot project is underway (also involving the EPA, DTSC, and Pick Your Part in Hayward) to instruct local auto dismantlers how to handle mercury switches. Sustainable Conservation is also supporting legislation to assess fees on new vehicles to fund incentives for auto dismantlers and greater enforcement of auto dismantlers. These efforts are relevant to the Stormwater permittees' outreach to industries.

Pilot Fluorescent Lamp Recycling Project

The Palo Alto Regional Water Quality Control Plant (RWQCP) is piloting a fluorescent lamp recycling program. The Palo Alto RWQCP recruits hardware stores to serve as collection centers, publicizes the program, and pays for pick up and transport of the used fluorescent lamps.

If it is demonstrated that such programs have a significant mercury reduction environmental benefit, then the Sacramento Stormwater Program may be interested in retail center collection programs, as a means of obtaining pollutant reduction credit towards the forthcoming mercury TMDL WLA.

Enhanced Household Hazardous Waste Collection Program

The Santa Clara County Regional HHW Program was recently awarded a grant to conduct public outreach, enhance collection programs and sites for mercury-containing universal wastes (specifically thermometers, fluorescent lamps, and household batteries), and establish a thermometer exchange program. This work is getting underway in 2004.

Obtaining pollutant credits for enhanced HHW collection programs for mercury containing wastes may be of interest to the Stormwater Program in meeting the forthcoming TMDL mercury WLAs if it is demonstrated that such programs have a significant mercury reduction environmental benefit.

Air Quality Studies Related to Mercury

In 2000, the Sacramento Stormwater Program collected a total of nine rainfall samples during three wet weather events. The resulting data were highly qualified and reported as the upper limit of true concentrations with data users cautioned in their use of the data. The range of total mercury in the nine samples was 7.79 to 16.31 ng/L.

The Stormwater Program also keeps abreast of relevant atmospheric deposition data collected by others. The U.S. Geological Survey (USGS) collected atmospheric deposition samples in Sacramento at a monitoring station on T Street during the mid-1990s. The draft USGS data showed that total mercury concentrations were generally below or at 2 ng/m³. A study by the San Francisco Estuary Institute (SFEI) estimated the mercury contribution of direct atmospheric deposition to the Bay-Delta estuary at 27kg/year (59.5 pounds/year); the SFEI data showed an average total mercury concentration of 2.1 ng/m³, similar to the draft Sacramento data. [Note: In the San Francisco Bay Mercury TMDL, no WLA reduction was assigned to atmospheric deposition; it was considered an uncontrollable source.]

MERCURY REDUCTION STRATEGY

Overview

The goals of this Mercury Plan are to reduce mercury discharged in Sacramento area urban runoff to the MEP and to improve the Stormwater Program's position to knowledgeably participate in and respond to the forthcoming Delta and Sacramento River Mercury TMDLs.

To accomplish the mercury reduction goal, the plan:

- Incorporates the Stormwater Program's existing BMPs that reduce mercury through sediment control/removal.
- Adds new pollution prevention BMPs to satisfy permit specified concepts. The new BMPs promote the proper handling and disposal of mercury-containing products by permittee employees, the commercial/industrial sector, and the general public.

The plan incorporates the Stormwater Program's existing mercury monitoring to help assess water quality benefits over the long-term.

To accomplish the goal of being able to respond to forthcoming TMDL requirements, the Mercury Plan includes participating and tracking relevant activities and programs, including those exploring watershed offset projects as a viable means of acquiring pollution-reduction credits, if necessary in the future.

Compliance with Permit Requirements

This Mercury Plan meets the general permit provision to control pollutants that cause exceedances of water quality standards or impairment of beneficial uses—in this case mercury—and to control them to the MEP. As stated previously, the State Water Resources Control Board’s Senior Counsel has stated that achieving the MEP standard requires a meaningful, rather than a perfunctory program. This Mercury Plan fulfills that requirement as it was developed through a thoughtful process and the selected BMPs will be periodically evaluated and modified and thus fits into the Stormwater Program’s iterative process of thoughtful development, implementation of selected activities, and evaluation.

The Mercury Plan also fulfills the permit requirement for the development of a Mercury Plan that addresses six listed concepts. Attachment C specifically describes how the actions in the plan relate to the listed concepts in the permit.

Relationship to Forthcoming Mercury TMDLs

As previously discussed (see the section on key regulations), the Regional Board is developing TMDLs for mercury for both the Delta and the Sacramento River. As part of that, the Regional Board is expected to assign a mercury WLA to Sacramento area urban runoff and may require a load reduction in Sacramento area urban runoff mercury discharges. A load reduction requirement would likely necessitate the calculation of load reductions/avoidances attributable to the Stormwater Program BMPs presented in this Mercury Plan. If the BMPs discussed in this Mercury Plan do not reduce mercury discharges enough to satisfy forthcoming requirements, then improvements to the selected BMPs or new BMPs or approved offset projects will likely be necessary.

In order to knowledgeably participate in, comply with, and integrate the forthcoming TMDLs, the Stormwater Program will:

- Track, review, and comment on development of the draft TMDLs.
- Stay abreast of the consequences to Bay Area urban runoff management related to the June 2003 San Francisco Bay Mercury TMDL.
- Begin to consider how to quantify Sacramento Stormwater Program BMP mercury load reductions/avoidances.
- Track the SRCSD’s exploration of the feasibility of obtaining reduction credits through implementation of watershed offset projects.

The Strategy

The Stormwater permittees will implement this Mercury Plan. Later, the permittees will modify this Mercury Plan, if needed, once the Regional Board adopts Delta and Sacramento River mercury TMDLs.

Assuming the adopted TMDLs assign a mercury WLA to Sacramento area urban runoff (and therefore require a quantifiable load reduction in mercury discharged with runoff), the permittees will develop methods to calculate estimated mercury load reduction/avoidances associated with the Mercury Plan BMPs. The calculation methods will be at a similar level of detail as the Delta and Sacramento River TMDL load calculations, so that the estimated BMP load reduction/avoidances can be used appropriately to obtain credit toward any urban runoff WLA. If this Mercury Plan proves insufficient to meet load reductions mandated by the adopted TMDLs, then the Stormwater permittees will:

- Consider additional and/or improved BMPs to seek to further reduce mercury in Sacramento area urban runoff, and/or
- Make up the difference using watershed offset projects, if that is established as a feasible option.

THE MERCURY PLAN

Sediment Removal BMPs

This Mercury Plan incorporates sediment control and removal BMPs that the Stormwater Program already implements. BMPs that remove sediment also remove associated particulate bound pollutants, including particulate bound mercury. Sediment control/removal BMPs include:

- Erosion and sediment control BMPs implemented under the Construction Element.
- Sediment control BMPs implemented under the Commercial/Industrial Element.
- Operational BMPs implemented under the Municipal Operations Element – cleaning streets, detention basins, and storm-drainage pipelines, sumps, and channels.
- On-site and regional (detention basins) stormwater treatment facilities implemented under the New Development Element.

Municipal Operations

This Mercury Plan expands the Stormwater Program's Municipal Operation Element to ensure that each permittee properly handles and disposes of mercury containing products. A survey of the permittees' current use, handling, and disposal of mercury containing products will provide the basis for determining the need for more clearly defined procedures. As needed, individual permittees will establish additional procedures for proper handling and disposal.

A draft municipal survey has already been developed (see Attachment D) based on a similar survey by SCVURPPP. (The SCVURPPP's mercury-reduction efforts were previously described; see the section on related efforts). In addition to being an information-gathering tool, the survey will help educate permittee employees; the survey includes information on UWR requirements established by the DTSC, which apply to the permittees. Each permittee will identify specific departments and employees to be surveyed. The Stormwater Program will seek technical assistance to administer and evaluate the municipal survey to ensure a consistent approach.

After the survey is conducted, the Stormwater Program will prepare a technical memorandum that will:

- Summarize and evaluate the survey results (what and how many mercury containing products are being used and the current handling and disposal methods).
- Describe alternative ways to establish or improve proper handling and disposal procedures such as:
 - Additional internal outreach on UWR requirements.
 - Recycling programs (like the fluorescent lamp recycling program the County of Sacramento is establishing for County owned buildings).
 - Formally approved municipal procedures (for handling, storage, recycling, disposal, and/or spill response).
- Recommend priorities (of departments, products, etc.) for further action based on how best to minimize the potential for mercury pollution.

As appropriate, the technical memorandum will incorporate guidelines developed by SCVURPPP related to the handling of mercury containing products.

Based on the evaluation and alternatives presented in the technical memorandum, the individual permittees will determine what additional actions are most appropriate for their agency. Each permittee will describe its selected course of action, including (1) training needs, if any, (2) implementation schedule, (3) implementation responsibility, and (4) tracking and reporting mechanisms. As appropriate, tracking and reporting mechanisms will include ways to estimate the amount of mercury diverted from the environment.

Public Outreach

The Stormwater permittees will add mercury messages to the public outreach they conduct through the Stormwater Program's Public Outreach Element. The permittees will include messages about mercury contamination in fish and DHS fish consumption advisories, not just messages related to preventing mercury pollution. Fish consumption outreach messages will be consistent with and supportive of consumption advisories provided by public health officials. The desired end result is increased awareness by the general public of proper handling and disposal of mercury containing products and increased awareness of fish contamination issues and advisories in the Sacramento area. Specifically:

- The Permittees will incorporate mercury messages into public education materials, school presentations, community events, etc. as appropriate, when existing materials are revised or new materials are developed.
- The County of Sacramento and City of Sacramento, which have dedicated stormwater websites, will add a mercury webpage and will provide directed links to other websites such as the SRCSD website for information on thermometer recycling, the DHS website for information on fish consumption advisories (once that is established), and local HHW websites for information on mercury recycling. The added mercury webpage will highlight UWR requirements for mercury recycling and will also highlight fish consumption issues.
- Other permittees will add links between their general municipal websites and the two dedicated stormwater websites.
- The Stormwater permittees will coordinate with local HHW programs (see the text box with information on local HHW programs) to:
 - Encourage development of a regionally consistent list of recyclable mercury containing products. This list will be posted on the two stormwater websites and its posting on local HHW websites will be encouraged.
 - Discuss infrastructure and budgetary concerns that local HHW programs may have regarding a corresponding increase in mercury product recycling.
 - Discuss documentation of mercury product recycling as a possible way to help estimate credit towards mercury load reduction/avoidances.

To help with this coordination, the Stormwater Program will seek more information on how SCVURPPP coordinated with local HHW programs in its area.

- The Stormwater Program will consider adding mercury awareness questions to its existing public opinion survey. There is a need to keep the survey a manageable length, so mercury awareness questions will be considered in relation to other public opinion survey priorities.

Local Household Hazardous Waste Collection Programs

The **County of Sacramento** operates a collection center for HHW, which accepts mercury containing products. Mercury thermometers and fluorescent tubes are listed on their outreach materials as products that they accept. Residents may drop off HHW on Tuesdays, Thursdays, Saturdays, and Sundays.

The **City of Sacramento** operates a collection center for HHW which accepts mercury containing products. Flyers in utility bills state what materials are accepted. City of Sacramento HHW website materials list small household batteries but no other mercury containing products. Residents may drop off HHW on Fridays and Saturdays.

The **City of Elk Grove**, in conformance with Public Resources Code #41500, has submitted the City's HHW Element Plan to the State Office of Local Assistance. State approval is pending. Elk Grove residents currently have access to the City of Sacramento's HHW collection centers.

The **City of Folsom** operates a pick-up by appointment HHW program and has a variance from DTSC to accept mercury containing products by pick-up. A household may call and schedule a pick-up as frequently as twice a month.

The **City of Galt** sponsors an annual Galt Cleanup Day which accepts HHW including mercury containing products.

Commercial/Industrial Outreach

This Mercury Plan adds activities to the Stormwater Program's Commercial/Industrial Element to promote proper handling and disposal of mercury containing products by the commercial/industrial sector. Specifically, the permittees will develop and distribute a fact sheet to promote proper handling and disposal of mercury containing products by commercial/industrial businesses. Distribution of the fact sheet will be accomplished through coordination with other interested entities such as the Sacramento County Business Environmental Resource Center (BERC) and local pretreatment, solid waste, and hazardous waste agencies. Stormwater Program staff will also periodically track the Sustainable Conservation auto dismantler pilot project to stay abreast of and incorporate successful aspects of that effort into Stormwater Program commercial/industrial outreach.

The fact sheet will include information on the UWR as well as information on how to participate in the Conditionally Exempt Small Quantity Generator (CESQG) program. [See the text box with CESQG information.] The fact sheet will be developed in coordination with the County and the City HHW programs (which accept CESQG wastes). Input will also be sought from BERC and from the County Environmental Management Department (EMD). BERC's mission is to help Sacramento County businesses understand and comply with federal, state, and local environmental regulations and the Stormwater Program currently works with BERC to develop and distribute various guidance materials for selected industries. The County EMD inspects

certain commercial/industrial businesses for compliance with hazardous waste regulations and (under a Memorandum of Agreement with the Stormwater Program) for stormwater pollution prevention.

Classifications of Commercial/Industrial Businesses for Mercury Waste Disposal

Conditionally Exempt Small Quantity Generators. Mercury containing products (and other hazardous wastes) are accepted by the County and the City of Sacramento HHW collection centers from small businesses, which have obtained an EPA identification number as a CESQG. Up to 220 pounds or 27 gallons per month of hazardous waste is accepted from CESQG businesses. Fees are charged for disposal of hazardous waste from CESQG businesses.

Small and Large Quantity Handlers. Commercial businesses with more than 220 pounds or 27 gallons of universal waste (which includes mercury containing products) per month but less than 5.5 tons at any one time are classed by the DTSC as small quantity handlers. Commercial businesses that accumulate more than 5.5 tons of universal waste at any one time are classed as large quantity handlers. Both small and large quantity handlers must follow disposal guidelines established by the DTSC.

The fact sheet promoting proper handling/disposal of mercury containing products will be consistent with guidance and regulations from the DTSC and will be disseminated in a number of ways:

- It will be posted on the County and the City of Sacramento stormwater websites along with a link to the BERC website. Posting on local HHW websites and on the BERC website will be encouraged.
- County EMD inspectors will distribute the fact sheet to automobile salvage yards, auto body shops, auto dealers, and metal recyclers, which it inspects for stormwater pollution prevention.
- The fact sheet may be used by Commercial/Industrial Element Stormwater Program staff for outreach to other commercial/industrial business types (such as general contractors, refuse haulers, and landfills) as program resources and priorities allow.

Target Pollutant Reduction Program

This Mercury Plan incorporates and expands coordination/tracking efforts that the permittees already undertake as part of their Target Pollutant Reduction Program. It also adds a new element to that program—the preparation of a fluorescent lamp recycling outreach plan and the evaluation of the feasibility/benefit of implementing that plan.

The Stormwater Program will collaborate with and track a variety of programs to promote regional consistency and to improve its position to knowledgeable participate in and respond to the forthcoming Delta and Sacramento River Mercury TMDLs.

The Stormwater permittees will continue to participate in and collaborate with other watershed programs related to mercury control, principally through participation in the DTMC. Topics discussed by the DTMC that are of interest to the Stormwater Program include development and implementation of mercury TMDLs and SRWP mercury monitoring of non-urban creeks on the east side of the Sacramento Valley. The Stormwater permittees will also continue to track and collaborate individually with these programs, as appropriate, on topics such as the SRCSD study of the feasibility of obtaining pollutant reduction credits for watershed offset projects, SRCSD mercury public education efforts, and determination of fish consumption advisories by the DHS.

The Stormwater permittees will continue to track air pollution studies that may yield information on air emissions and deposition as a source of mercury to Sacramento area urban runoff. To date, this has included a review of draft air deposition data collected by the USGS in Sacramento, collection of a limited number of Sacramento rainfall samples by the Sacramento Stormwater Program, and a review of the SFEI study of atmospheric deposition as a source to San Francisco Bay. Another study that will be tracked is the atmospheric deposition study that has recently been funded for the Moss Landing Marine Laboratory, in conjunction with Texas A & M University, to collect mercury atmospheric data from the Coast Ranges, the Sierra Nevada Range, and the central Delta. In addition, the Stormwater permittees will track the Regional Board's review of data obtained from the Air Resources Board on statewide industrial mercury emissions and will coordinate with the Regional Board, as appropriate, in assessing this information for its pertinence to mercury air emission sources in Sacramento County.

The Stormwater permittees will continue to participate in California Stormwater Quality Association (CASQA) meetings and network with other stormwater programs such as SCVURPPP that are implementing urban runoff mercury reduction programs. Tracking these stormwater programs will help the Sacramento Stormwater Program stay abreast of other stormwater programs' experience related to BMP implementation. This will include tracking of the effect of the San Francisco Bay Mercury TMDL on Bay Area stormwater programs. The permittees will also periodically track related retail center mercury collection programs such as the Palo Alto RWQP fluorescent lamp recycling program and the Santa Clara County Regional HHW mercury outreach and collection program. These programs are of interest to the Sacramento Stormwater program in the event that they significantly reduce mercury inputs to the environment and/or are used to obtain mercury reduction credits towards a TMDL WLA.

The forthcoming Delta and Sacramento River Mercury TMDLs will be reviewed with respect to urban runoff WLAs. The Stormwater permittees will comment and provide input on the draft TMDLs during the public review process, as appropriate.

In addition to the activities described above, the permittees will explore the feasibility of improving outreach to residents and the commercial sector regarding fluorescent lamp recycling. A feasibility study for diverting mercury waste products is one of the required concepts this Mercury Plan must address, and fluorescent lamps are thought to be the most widely used mercury-containing products in the urban area. The permittees will develop a fluorescent lamp recycling outreach plan to promote fluorescent lamp recycling by building on the success of existing local HHW collection programs. The fluorescent lamp recycling outreach plan will describe options for improving awareness about fluorescent lamp recycling, such as through more outreach, more targeted outreach with respect to fluorescent lamps, more avenues for outreach, and additional coordination and partnering with the SRCSD, HHW, BERC, etc. The plan will also outline phased implementation options.

To help develop the fluorescent lamp recycling outreach plan, the permittees will obtain information on the public outreach aspects of the Palo Alto RWQP retail center fluorescent lamp recycling program and the Santa Clara County Regional HHW mercury outreach and collection program. The permittees will also coordinate with local HHW programs to discuss infrastructure and budgetary concerns they may have regarding an increase in fluorescent lamp recycling and to discuss documenting an increase in fluorescent lamp recycling. Documentation of increased recycling potentially could be used to help estimate mercury load reduction/avoidances.

Once the fluorescent lamp recycling outreach plan is developed, the Stormwater Program will estimate the costs and staff time to implement the outreach plan and will explore the willingness of potential partners to participate. The Stormwater permittees will then consider, in relation to other Stormwater Program priorities, the feasibility of funding the fluorescent lamp recycling outreach plan.

The environmental benefit of expanded public outreach on fluorescent lamp recycling is that proper disposal and handling reduces the chance of breakage and release of the mercury in fluorescent lamps into the urban environment. The magnitude of such breakage and release and its impact on urban runoff quality are not quantified. Therefore, the benefit to urban runoff quality from increased fluorescent lamp recycling is not known; however, it is expected to be substantially less than the estimated 8.8 pounds/year of mercury that are discharged in Sacramento area urban runoff.

Monitoring

This Mercury Plan incorporates the mercury monitoring undertaken by the Stormwater Program through its Monitoring Program. The text box below shows the mercury monitoring that is being done in compliance with the permit. In addition to this required level of monitoring, the permittees will consider incorporating mercury monitoring into the design of future BMP studies in order to estimate the extent to which the BMP reduces mercury.

The monitoring data are used to adjust the Stormwater Program's relative ranking of target pollutants (conducted once each permit term), will be used in the future to develop a long-term trend evaluation, and are used by other agencies and entities (e.g., the regional board and the DTMC) to estimate Sacramento area urban runoff mercury loads.

Mercury Monitoring Data Collection, 2003/2004

Urban Runoff Discharge – total and methyl mercury analyses – Sump 104, Sump 111, and Strong Ranch Slough – 3 wet weather and 2 dry weather samples per year, on a three year cycle with monitoring taking place two years in a row followed by one year off.

Creeks – total and methyl mercury analyses – Arcade Creek at Watt Avenue, Morrison Creek at Mack Road, Willow Creek at Blue Ravine Road – one wet weather sample, to be collected in 2003/04.

American and Sacramento Rivers – total and methyl mercury analyses – American River at Nimbus Dam, Capitol City Expressway, Discovery Park; Sacramento River at Veterans Bridge, Freeport – six events per year, three dry weather events and two additional wet weather events coordinated with urban runoff discharge sampling events.

Natomas Wet Detention Basin – total and methyl mercury analyses – two composite samples/rain season during one wet weather event at inlet and outlet monitoring locations; study will start in 2004/05 and continue through three rain seasons.

EVALUATION AND MODIFICATION

An overall review will be conducted at least once every permit term. In addition, the annual reports will contain information documenting implementation activities. Also, the long term trend analysis of the discharge monitoring data will eventually provide quantitative water quality information on mercury reduction.

Overall Review

Purpose: Feedback for improvement

Category: Effectiveness measure

Frequency: Once every permit term, or as needed

Responsible Entity: Joint Stormwater Program

Nature of the Review: Recommendations for improvement will be made based on discussion of:

- Joint Stormwater Program and/or individual permittee experience in implementing mercury reduction BMPs.
- Updated information on sources not currently included in the strategy.

- Relevant work of other dischargers that is related to the characterization, impact, and/or control of mercury in urban runoff.
- Coordination with other local agency actions in the Sacramento area such as local HHW programs, BERCC, and the SRCSD.
- Other activities conducted under the Target Pollutant Reduction Program.

Individual Permittee Actions

Purpose: Demonstrate compliance

Category: Mostly performance measure

Frequency: Annual

Responsible Entity: Individual permittees

Nature of the Report: Report on actions under program elements:

- Municipal Operations – report on the Municipal Mercury Survey and resulting actions.
- Public Outreach – report on website outreach and other efforts.
- Commercial/Industrial – report on the Fact Sheet and its dissemination.

Monitoring Data Long Term Trend Evaluation

Purpose: Track mercury levels in discharge over time

Category: Effectiveness measure

Frequency: In approximately 20 years

Responsible Entity: Stormwater Monitoring Program

Nature of the Review: Water quality trend evaluation

One of the principal uses of the urban runoff data is to evaluate the overall effectiveness of the Stormwater Program through trend evaluation. The permittees adopted a monitoring strategy of discharge monitoring on a cycle of two years on and one year off to allow for the collection of sufficient data to conduct a long term statistical trend evaluation.

IMPLEMENTATION

The Mercury Plan activities are part of an extensive array of activities undertaken through the Stormwater Program. In order to manage all their activities within budget, the Stormwater permittees have prioritized certain actions ahead of others. In addition, some of the Mercury Plan actions relate to the requirements of the forthcoming mercury TMDLs so implementation of those actions depends on when the TMDLs are adopted. The implementation schedule (see Table 1) is shown through 2007/08, the approximate expected term of the 2002 NPDES Permit.

Table 1. Mercury Plan Implementation Schedule

Actions	JPA	IPA	04/05	05/06	06/07	07/08
Municipal Operations Element						
1. Identify specific permittee departments to be surveyed for mercury product use.		X				
2. Conduct the municipal survey.	X					
3. Summarize and evaluate the municipal survey results.	X					
4. Determine further individual permittee actions and implementation schedule.		X				
5. Implement the selected actions.		X				
Operational BMPs to clean streets, detention basins, and the drainage infrastructure.						
Public Outreach Element						
1. Incorporate mercury recycling messages into general materials/events.	X	X				
2. Add mercury webpage to County and City of Sacramento stormwater websites.		X				
3. Add links from other permittee general municipal websites.		X				
4. Coordinate with local HHWs to post consistent list of recyclable mercury devices.	X					
5. Consider adding mercury awareness to the Stormwater Program opinion survey.	X					
Commercial/Industrial Element						
1. Develop commercial/industrial fact sheet on disposal of mercury products/ CESQG.	X					
2. Post the fact sheet on the County and City of Sacramento stormwater websites.		X				
3. Encourage posting on BEREC, HHW websites.						
4. Supply fact sheet for distribution to County EMD staff.	X					
5. Conduct outreach to other commercial/ industrial businesses, as appropriate.		X				
Construction Element						
Erosion and sediment control BMPs						
New Development Element						
On-site and regional stormwater treatment BMPs						
Target Pollutant Reduction Program						
1. Participate through the DTMC on mercury watershed programs.	X					
2. Track urban runoff and HHW mercury reduction programs.	X					
3. Track mercury air deposition and emission studies relevant to the Sacramento area.	X					
4. Review and provide input to Delta and Sacramento River TMDLs.	X					
5. Develop mercury load reduction calculation methods for BMPS.	X					
6. Develop fluorescent lamp recycling outreach plan and consider its feasibility/benefit.	X					
DOCUMENT COMPLETION OF TASKS IN ANNUAL REPORTS.		X		❖	❖	❖

JPA = Joint Program Activity

IPA = Individual Permittee Activity

ATTACHMENT A

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ATTACHMENT B

MERCURY CONTAINING PRODUCTS IN THE URBAN ENVIRONMENT

Mercury Containing Products	Principal Use/Presence	Exposure to Runoff
<u>Switches</u> * Automobile switches in anti-lock brakes, active ride control systems, headlights, tail lamps, and instrument panel Appliance switches such as fan controls, chest freezer lids, fire alarm boxes, and washing machine lids Other switches used in wall switches, building security devices, fire alarm boxes, laptop computers, and portable phones	Auto Dismantlers Auto Body Shops Metal Recyclers Landfills and refuse haulers Public agency sector Commercial/industrial sector Residential sector	Potential release to environment from automobile crushing (auto dismantlers) Potential release to environment from breakage during handling/disposal.
<u>Lamps</u> * Metal halide lamps (high intensity discharge for businesses and homes) High pressure sodium lamps (street lamps and outside security lighting) Fluorescent lamps (buildings)	Landfills and refuse haulers Public agency sector Commercial/industrial sector Residential sector	Mostly indoor use Potential release to environment from breakage during handling/disposal.
<u>Mercuric oxide batteries</u> * Button cell batteries for hearing aids, watches, etc.	Landfills and refuse haulers Residential sector	Potential release to environment from breakage during handling/disposal.
<u>Medical products</u> Blood pressure monitors, thermometers *, medicines (thimerasol, mercurochrome)	Dentists Hospitals Laboratories Nursing homes Veterinary clinics Landfills and refuse haulers Residential sector	Mostly indoor use Potential release to environment from breakage during handling/disposal.
<u>Detergents/cleaners</u> Examples include Ajax, comet, dove soap, ivory dishwashing liquid, soft cide soap, sparkleen detergent	Public agency sector Commercial/industrial sector Residential sector	Mostly indoor use

* classed as universal wastes

ATTACHMENT C

LINKAGE BETWEEN PERMIT REQUIREMENTS AND THE MERCURY PLAN

Six Specified Concepts of Permit Provision 14 a.

- i. Development and adoption of policies, procedures, and/or ordinances to implement the Mercury Plan.*
- ii. The reduction, to the maximum extent practicable, of mercury from controllable sources in stormwater, including the identification of mercury-containing products used by the Permittees and a schedule for their control.*

The municipal survey will identify permittee use of mercury containing products. The end result of the municipal survey will be the selection of actions and procedures, as needed, by individual Stormwater permittee agencies with respect to proper handling and disposal of mercury containing products that are appropriate based on the evaluation of the survey results. The purpose of the selected actions and procedures will be to reduce mercury releases from breakage of mercury containing products. The permittees are to identify a schedule for implementation. This is discussed in the section on Municipal Operations.

- iii. Study the feasibility and benefits to local stormwater quality of residential and commercial programs for diverting mercury-containing waste products (potentially including thermometers and other gauges, batteries, fluorescent and other lamps, switches, relays, sensors and thermostats) from the waste stream.*

A fluorescent lamp recycling outreach plan will be developed to promote fluorescent lamp recycling, which is required under the Universal Waste Rule (UWR), through existing local household hazardous waste collection programs, which accept mercury waste from residents and commercial businesses that qualify as conditionally exempt small quantity generators (CESQG). During development of the plan, costs and feasibility of implementation will be considered. The benefit to stormwater quality is expected to be substantially less than 8.8 pounds/year of mercury reduction. This is discussed in the section on the Target Pollutant Reduction Program.

- iv. Coordination with Regional Board staff, to the extent appropriate, in conducting an assessment of the contribution of air pollution sources to mercury in the Permittees stormwater.*

The Stormwater permittees have begun and will continue to track air pollution studies that may yield information on air emissions and deposition as a source of mercury to Sacramento area urban runoff. In addition, the Stormwater permittees will track the Regional Board's review of data obtained from the Air Resources Board on statewide industrial mercury emissions and will coordinate with the Regional Board, as appropriate,

in assessing this information for its pertinence to mercury air emission sources in Sacramento County. This is discussed in the section on the Target Pollutant Reduction Program.

v. A public education, outreach, and participation program designed to reach residential, commercial and industrial users or sources of mercury-containing products or emissions.

The Stormwater permittees will add mercury messages and links to their websites and incorporate mercury messages into other public education materials, school presentations, community events, etc., as appropriate, when existing materials are revised or new materials are developed. This is discussed in the section on Public Outreach.

The Stormwater permittees will also develop and distribute a fact sheet on proper handling and disposal of mercury containing products by commercial/industrial businesses. The fact sheet will include information on the UWR as well as information on how to obtain identification as a CESQG. This is discussed in the section on the Commercial/Industrial Outreach.

vi. Participation with other organizations to develop programs to reduce or eliminate sources of mercury within the Sacramento River watershed.

The Stormwater permittees will continue to participate in and collaborate with other watershed programs, principally through participation in the DTMC. Of particular interest is the topic of the feasibility of obtaining pollutant credits for watershed offset projects. This is mentioned in the sections on Related Mercury Control Efforts and Studies and the section on the Target Pollutant Reduction Program. Participation in efforts that are managed and directed by other groups that seek to establish watershed offset projects as a viable means of acquiring credit towards forthcoming TMDL requirements is discussed in the section on the Target Pollutant Reduction Program.

Other Permit Requirements

Provision 14 a also requires that the Mercury Plan address training needs and needed technical assistance and that the plan include a schedule for implementation.

Technical assistance will be sought to administer and evaluate the municipal survey. The individual permittees will develop a discussion of any training needs related to selected actions and procedures for proper handling and disposal of mercury containing products within their agency. Technical assistance may also be sought in developing methods for calculating BMP load reductions/avoidances.

The implementation schedule is shown in Table 1.

ATTACHMENT D

DRAFT SURVEY OF MERCURY CONTAINING PRODUCTS USED BY THE SACRAMENTO STORMWATER PERMITTEES

County of Sacramento
City of Sacramento
City of Citrus Heights
City of Elk Grove

City of Folsom
City of Galt
City of Rancho Cordova

FACILITIES/DIVISIONS TO BE SURVEYED

- Corporation Yard
- Airport
- Waste Management Facilities
- Building Maintenance
- Street Maintenance
- Vehicle Maintenance
- Drainage System
- Water/Wastewater Laboratories
- Health Department/Clinic
Laboratories
- Other, if appropriate

INTRODUCTION/ PURPOSE OF SURVEY

The Stormwater Program is required under its NPDES Permit to develop a Mercury Plan that minimizes mercury exposure to stormwater and addresses recycling/disposal of mercury containing products.

In addition, the state Department of Toxics Substances Control Universal Waste Rule (UWR) now specifies requirements for handling of certain mercury containing products, called universal waste. These include button cell batteries, mercury thermometers, and several types of lamps including fluorescent lamps. Prior to the UWR, these wastes were subject to full hazardous waste disposal requirements. An agency that accumulates 5,000 kg (11,023 pounds) or less of universal waste at any given time is considered a small quantity handler; an agency that accumulates more than 11,023 pounds of universal waste is a large quantity handler.

This survey is designed to collect information on what mercury containing products are currently used, handled, and/or disposed of by agency staff, including universal wastes, so that consideration of any changes to current procedures can be identified, discussed, and appropriately planned and implemented.

MERCURY CONTAINING PRODUCTS

1. Lamps (universal waste)

Metal halide lamps (high intensity discharge for businesses and homes)
High pressure sodium lamps (street lamps and outside security lighting)
Fluorescent lamps (buildings)
Mercury vapor lamps (warehouse, parking lots, etc.)
Neon lamps (signs)

2. Mercury Containing Switches

Wall switches, fan controls, building security devices, fire alarm boxes, laptop computers, portable phones or appliances with mercury containing devices

3. Automobile Devices

Anti-lock brakes, active ride control systems, headlights, tail lamps, instrument panel, trunk and hood glove box light switches (use of mercury switches to be prohibited in new cars)

4. Batteries (universal waste)

(Sealed batteries other than automobile type spent lead-acid batteries)

5. Thermostats (universal waste)

6. Thermometers and other laboratory equipment

7. Certain detergents

Ajax, comet, dove soap, ivory dishwashing liquid, soft cide soap, sparkleen detergent

PRODUCT-SPECIFIC QUESTIONS

Mercury Containing Product	Do you handle?	How many are handled monthly? Approximate estimate OK	What are recycle/disposal procedures? a) Trash b) Return to manufacturer c) Collected as hazardous waste d) Collected as universal waste and sent to recycling facility e) Other (describe)
Metal Halide Lamps			
High Pressure Sodium Lamps			
Fluorescent Lamps			
Mercury Vapor Lamps			
Neon Lamps			
Mercury Switches			
Automobile Devices			
Button Cell Batteries			
Thermostats			
Thermometers			
Selected Detergents			

SURVEY ATTACHMENT – INFORMATION FROM THE UNIVERSAL WASTE RULE *

The Universal Waste Rule (UWR) does not identify any new materials as hazardous, but it establishes streamlined standards for collection and transportation of wastes designated as universal wastes. Prior to the UWR, these wastes were subject to full hazardous waste disposal requirements. Wastes became universal wastes when the California Department of Toxic Substances Control (DTSC) defined them as such. Universal wastes include mercury containing lamps, batteries, and thermostats. Municipal agencies must follow the rules for either large quantity or small quantity handlers of universal waste. Most agencies will be small quantity handlers and requirements for small handlers are as follows:

- The agency must label universal waste with the date it was generated.
- The agency must clean up any releases such as leaking batteries and broken fluorescent lamp tubes and manage the clean up wastes as hazardous waste.
- The agency must train employees in proper management of universal waste – how to handle, package, store, and label the waste as well as how to respond to releases.
- The agency must prepare proper shipping papers, such as a bill of lading. A Uniform Hazardous Waste manifest is not needed for universal waste shipments.
- The agency must arrange with a transporter to pick up the universal wastes. Contact the county or state environmental office or solid waste office for services in the Sacramento area.

* Additional UWR information will be provided during the conduct of the survey.